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Cooperative interaction and goal attainment among rural development organizations: a study in interorganizational relations

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Cooperative interaction and goal attainment among
rural development organizations: A study
in interorganizational relations

by

Anan Chiamcharoen

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
DOCTOR OF PHILOSOPHY

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Ames, Iowa

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CHAPTER I. INTRODUCTION

Introduction

The general objective of this dissertation is to investigate interorganizational properties relating to organizational goal attainment of rural development organizations. The real world and sociological discipline needs for an adequate conceptual framework for the analysis of interorganizational phenomena are of considerable interest to social scientists and social practitioners. The purpose of this introduction is to state the real world and sociological problems central to this dissertation, how this research study differs from previous rural development research and the specific objectives of this dissertation.

Real World Problem

Modern societies consist of numbers of complex formal organizations which can be viewed as organization societies (Presthus, 1965 and Etzioni, 1964). These organizations characterize ways of life and people are more dependent upon and dominated by them (Blau and Scott, 1962 and Etzioni, 1964). Etzioni (1964) has appropriately pointed out the essence of the importance of organizations as part of modern life:

Our society is an organization society. We are born in organizations, educated in organizations and spend most of our leisure time

paying, playing and praying in organizations. Most of us will die in an organization, and when the time comes for burial, the largest organization of all...the state must grant official permission (1964:1).

With increased numbers of organizations in societies a concomitant proliferation and diversification of organizational interrelationships become increasingly more obvious. Interorganizational relations phenomena, which refers to relations between formal organizations, is considered one of the central problems in modern societies. This problem is recognized by several writers who have expressed the need for systematic investigation into interorganizational phenomena (Hall and Clark, 1969; Hall, 1973; Etzioni, 1964; Klonglan et al., 1972; White, 1973; Aldrich, 1973). The lack of inquiry in this area is indicated by Etzioni (1964) who states that:

...the obvious question of how these organizations interact has not been systematically explored. We know a great deal about interaction among persons, something about interaction among groups, but surprisingly little about interaction among organizations (1964:110).

During the last two decades, research study in many empirical arenas has reflected the practical and urgent need for systematic inquiries into interorganizational relations. Most of the research work in this area has been done in the health and welfare field (Levine and White, 1961: Vlasak, 1963; Klonglan et al., 1969; Aiken and Hage, 1968; Eichhorn

and Wysong, 1968; Black and Kase, 1963; White, 1973; Klonglan and Paulson, 1971; White and Vlasak, 1970). Research studies in other areas includes: delinquency prevention and control (Miller, 1958); disasters (Form and Nosow, 1958; Dynes, 1969; Dynes and Quarantelli, 1969; Griffin, 1972); alcoholism (Klonglan et al., 1969); education (Clark, 1965; Hollister, 1972); rehabilitation and mental health (Black and Kase, 1963); and rural community development (Finley and Capener, 1967; Rogers and Vacin, 1972; Rogers and Glick, 1973b). Major emphasis of these studies is on relations between complex formal organizations.

Rural development offers possibilities of research in interorganizational analysis because it involves many levels and kinds of organizations with varying degrees of inter-relatedness in participation in development related programs and activities. Rural development aims to solve the income, social and welfare problems of rural communities in order to bring a better quality of life to rural people.

Development related organizations are engaged in development related activities as a means to attain their respective individual goals. Each operates, however, with a relative interdependence on other organizations. Each organization's interdependence to its organizational environment is important. The ability to attain organizational goals depends on its functional relationships with other

organizations with which it operates. It is assumed that increased cooperation between organizations will lead to an increase in organizational goal attainment of each participating organization.

Rogers (1971) conceives that the variance in the effectiveness of rural development organizations depends not only upon intraorganizational factors but also on the interrelations among these organizations. Understanding rural development is fundamentally a problem of understanding formal organizations and their interrelationships (Rogers, 1971:1).

One major obstacle in rural development has been the problem of cooperation between organizations providing development related services. One problem of rural development success has been duplication and overlapping efforts resulting from independent activities of the organizations. This duplication results in an ineffective use of resources. Another problem is that individual organizations have limited resources and each cannot make a significant impact upon the overall development effort. Likewise, rural development is faced with a fragmented delivery system with an urgent need for more cooperation between these organizations than presently exists.

Cooperative efforts between organizations providing development services seems to offer a more effective

approach to deal with the complex problems of rural development. Through this effort, individual organizations, working cooperatively, carry out development related programs and activities in relations with others in the organizational environment according to each organization's resource capabilities. Since interagency cooperation is considered as one of the important social processes (Aiken and Hage, 1968; Evan, 1966; Levine and White, 1961; Litwak and Hylton, 1962; Reid, 1970; Tropman, 1974), it seems necessary to assess the impacts or consequences of interorganizational relations on goal attainment of rural development related organizations.

Organizations which provide development related programs and services at the county level play a crucial role in rural development. These organizations, both public and private, can be classified as "service organizations" or "mutual associations," according to Blau and Scott (1962). These organizations are considered as the basic units of analysis in this dissertation. The empirical setting for this research is the 169 rural development related organizations located in 16 counties in Iowa.

Specifically, cooperative interaction and organizational goal attainment will focus on three main types of organizations engaged in development related activities at the county level. They are: (1) U.S. Department of Agricultural

agencies; (2) State and county public agencies; and (3) Private and voluntary associations. All the organizations selected in each county will be considered as the organization set according to Evan's (1966) terminology. Each organization in each organization set will be treated as a focal organization. The organizations to which the focal organization interacts or relates to in the organization set will be referred to as members of its organization set or set organizations. This research problem is defined as the analysis of selected interorganizational factors relating to cooperative interaction and organizational goal attainment; and the relationship of or the impacts of cooperative interaction on organizational goal attainment of rural development related organizations.

Sociological Problem

The discussion of sociological problem relating to the study of interorganizational relations and organizational goal attainment in the discipline is presented under four major points.

First, there has been a need for information and knowledge to explain and understand interorganizational relations (IOR). Interorganizational relations is one of the major social processes. It is important to understand this general class of phenomena, especially how organizations of

various sectors are integrated in the community and society.

The problem of interorganizational analysis is the disjuncture among theory, methodology and empirical research (White and Vlasak, 1971, 1973; Aldrich, 1973; Heydebrand, 1971; Klonglan and Mulford, 1972; Klonglan et al., 1972; Hall and Clark, 1969; Hall, 1973; Aiken and Hage, 1972). The urgent need for more systematic investigation into the IOR phenomena to seek information and understanding for the development of IOR is apparent.

From a review of the existing IOR literature, little attention has been given to the horizontal relations of organizations participating in rural development in local communities. One effort expended in this dissertation is focused on cooperative interaction in terms of horizontal relations between development related organizations at a county level.

Cooperative interaction between organizations is of obvious importance for rural development. Organizations providing development related services and programs may cooperate with one another (i.e., through exchange of information or resources) and may at the same time compete with one another for scarce resources (i.e., labor, services, clients). The present dissertation study is designed to seek information and knowledge about how cooperative interaction is established (or occurred) between development

related organizations engaging in rural development. The sociological problem is to develop and empirically evaluate some of the existing body of IOR knowledge to see if it can account for the explanation and prediction of cooperative interaction of development related organizations.

Second, there has been a lack of empirical research devoted to a systematic inquiry concerning the impact or consequences of interorganizational relations. The major analytical concerns of the literature on IOR have been limited to treating IOR as the dependent variable or result, i.e., that which is to be explained, rather than as the independent, determinant or intervening variable to help explain the effects or impacts. In the IOR literature, the major concern is centered on the problem of coordination or cooperation which constitutes the central problem in this field. The consequences of IOR on organizational goal attainment or effectiveness has been neglected in empirical studies.

Several writers implicitly indicate or assume that IOR will lead to (better) goal attainment. Klonglan et al. (1972) have developed a general model of interorganizational relations and suggested four possible impact targets of IOR, namely, clients, organizations, interorganizational themselves and community. Hall (1973), Aiken and Hage (1972), Hall and Clark (1969), among others, have expressed

the need to study the consequences of IOR. Therefore, one pursuit that seems needed is the development of models to explain and/or predict the impacts of cooperative interaction on the level of organizational goal attainment.

This dissertation is designed to analyze and seek information and knowledge that will help to develop models that will explain and/or predict the impacts of cooperative interaction. The hypothesis to be tested is that an increase in the amount of cooperative interaction between organizations will lead to an increase in the level of organizational goal attainment.

The third sociological problem deals with the problem of an organization's dynamic relationship with its environment as it concerns its organizational goal attainment. These dynamic relationships include a wide range of relationships that take place between organizations. The environment of organizations has been treated as a context that generates constraint forces that, in turn, influence organizations' functions and performances. There has been a lack of empirical research in the literature, particularly in rural development, focusing on systematic inquiry of organizational goal attainment within the IOR context. There appears to be a need for the dynamic study of interorganizational analysis concerning organizational goal attainment as opposed to the traditional static type of intraorganiza-

tional analysis.

Therefore, this dissertation focuses on another sociological problem about the analysis and testing of fit of an IOR framework for analysis of organizational goal attainment. More specifically, the inquiry is directed toward the analysis of relationships between organizational decision making factors (namely, domain consensus, intraorganizational commitment and interorganizational commitment) and the goal attainment of development related organizations.

Finally, apart from theoretical interest, applied models of IOR have not been prevalent for general application even though current rural development efforts are underway. There is a crucial need to integrate relevant factors into applied models that will provide guidelines for social practitioners and the like to understand the nature and the potential use of IOR.

In summary, the delineation of the real world and sociological rationales for studying IOR in the rural development empirical arena may be obvious. The perceived gains are of considerable importance in both theoretical and practical realms. From the theoretical standpoint, knowledge and information gained from this study would add to the existing theory of IOR. From the practical viewpoint, the dissertation will provide information to help administrators, social practitioners and the like, understand

interorganizational behavior and its relationship to goal attainment.

Past Rural Development Studies and the Uniqueness of This Study

From the review of the literature, it is evident that none of the past rural development studies attempts to investigate the network of relations for each organization in terms of horizontal relations on a community basis. This kind of information is vital to an understanding of community response to rural development.

Conclusion based on the review of the literature is that the consequences on organizational goal attainment or effectiveness when scarce resources are allocated to cooperative efforts have been neglected in rural development research. During the last two decades, considerable research attention has been focused on several forms of IOR in various fields, but little attention seems to be given to the relations of interorganizational properties and organizational goal attainment in the area of rural development. The assumption involved in the emphasis on cooperation as a form of IOR which will lead to increased organizational goal attainment or effectiveness has not been empirically investigated in this area.

This dissertation attempts to identify interorganiza-

tional properties of development related organizations at the county level which relate to cooperative interaction and which, in turn, relate to organizational goal attainment. Drawing upon the proposed relationships between and among interorganizational properties and organizational goal attainment would seem to have theoretical as well as practical interest.

This dissertation is part of the analysis related to a larger study entitled "Public and Private Organizational Response to Rural Development," a project study headed by Dr. David L. Rogers, assistant professor of sociology at Iowa State University. The data used in this dissertation is part of the overall project data which was obtained in 1971. A series of research studies have been carried out and published based on these empirical data since the completion of the fieldwork in 1971.

The first study is "A study of interorganizational relations between the cooperative extension service and members of its organization set" by Vacin (1972). He applied Guttman scaling technique to construct the intensity of exchange relations (IOR) between a focal organization and set organizations and treated it as a dependent variable. He used two variable analysis to test bivariate relationships of eight single independent (organizational characteristics) variables and the dependent variable (IOR).

The second publication is a research monograph, "A deterministic model of interorganizational relations: An application to the community development process" by Rogers and Vacin (1972). This research used Guttman scaling technique to build and test a deterministic model of IOR. The authors examined the patterns of organizational contacts between a focal organization and set organizations.

The third study, "Organizational prestige: A comparative study of organizational evaluation," by Rogers (1972) used two variable analysis to analyze five independent variables and their bivariate relationships with organizational prestige.

The fourth monograph is a research study, "A sociometric approach to the analysis of interorganizational relations" by Rogers and Glick (1973a). They used sociometric techniques by applying matrix algebra to manipulate the original matrix of reciprocal choices to show the numbers of two-way linkages among organizations.

Finally, the publication, "Planning for interagency cooperation in rural development" by Rogers and Glick (1973b) is a descriptive study. This study summarized the procedures of collecting data, measurement and score distribution of each variable of the original data but offered no hypotheses testing.

With the exception of research studies and monographs

related to the rural development project mentioned earlier, none of the existing past rural development studies attempt to either identify IOR or its consequences. Therefore, the author will focus on a comparison between this dissertation and the other studies completed from Dr. Rogers' rural development project.

In comparing the present study with the earlier project studies, the first obvious distinction is found in the dependent variable. This study treats organizational goal attainment as the dependent variable which in part results from the effect of IOR, while most of the earlier project studies deal with IOR as the dependent variable.

The second distinction is that the present study attempts model building to examine the relationships between interorganizational properties and IOR and organizational goal attainment. This effort to develop a causal model of IOR in explaining organizational goal attainment is a crucial difference from earlier project studies. Specifically, this study examines causal relations among four independent variables (domain consensus, intraorganizational commitment, interorganizational commitment, and cooperative interaction) and their relationships with organizational goal attainment.

Another distinction of this dissertation is found in the variables (concepts) used to help explain cooperative

interaction (IOR). Of the three variables used to explain and understand IOR, only one (domain consensus) has been employed by Vacin to test its bivariate relationships with the intensity of exchange relations (IOR) between one focal organization and its set organizations.

Because of the distinctions outlined, the author believes that the present study is a unique contribution to the study of interorganizational relations.

Objectives of the Dissertation

The general objective of this dissertation is to examine interorganizational properties relating to organizational goal attainment of rural development related organizations.

To meet this general objective the following specific objectives of this effort at model building are:

1. Identification and delineation of the concept of interorganizational relations and its relationship to organizational goal attainment.
2. Identification and delineation of selected concepts related to interorganizational relations and organizational goal attainment.
3. Development of a causal model of interorganizational relations by which to explain and understand organizational goal attainment and application of path analysis to evaluate the causal model constructed.

CHAPTER II. THEORETICAL FRAMEWORK

Introduction

A conceptual causal model of interorganizational relations in explaining organizational goal attainment of rural development organizations is presented in this chapter. First, the specification of the conceptual variables theorized to be related to organizational goal attainment in the model is discussed. Second, the conceptualization of the dependent variable, organizational goal attainment is developed. Third, a review is made of the existing theory and past research relevant to the model. Fourth, the nature and bivariate linkages of the variables in the model are specified. Finally, the causal relations among the independent and dependent variables are articulated and a path model is developed.

The variables are categorized and presented in the form of a conceptual model shown in Figure 2.1. This model represents an attempt based on the existing body of IOR literature to differentiate meaningfully between variables which cause or produce the level of the focal organization's goal attainment. It is postulated that the level of the focal organization's goal attainment is a function of two major sets of factors: (1) interorganizational relations, a factor which is conceptualized as cooperative interaction between organizations, and (2) organizational decision

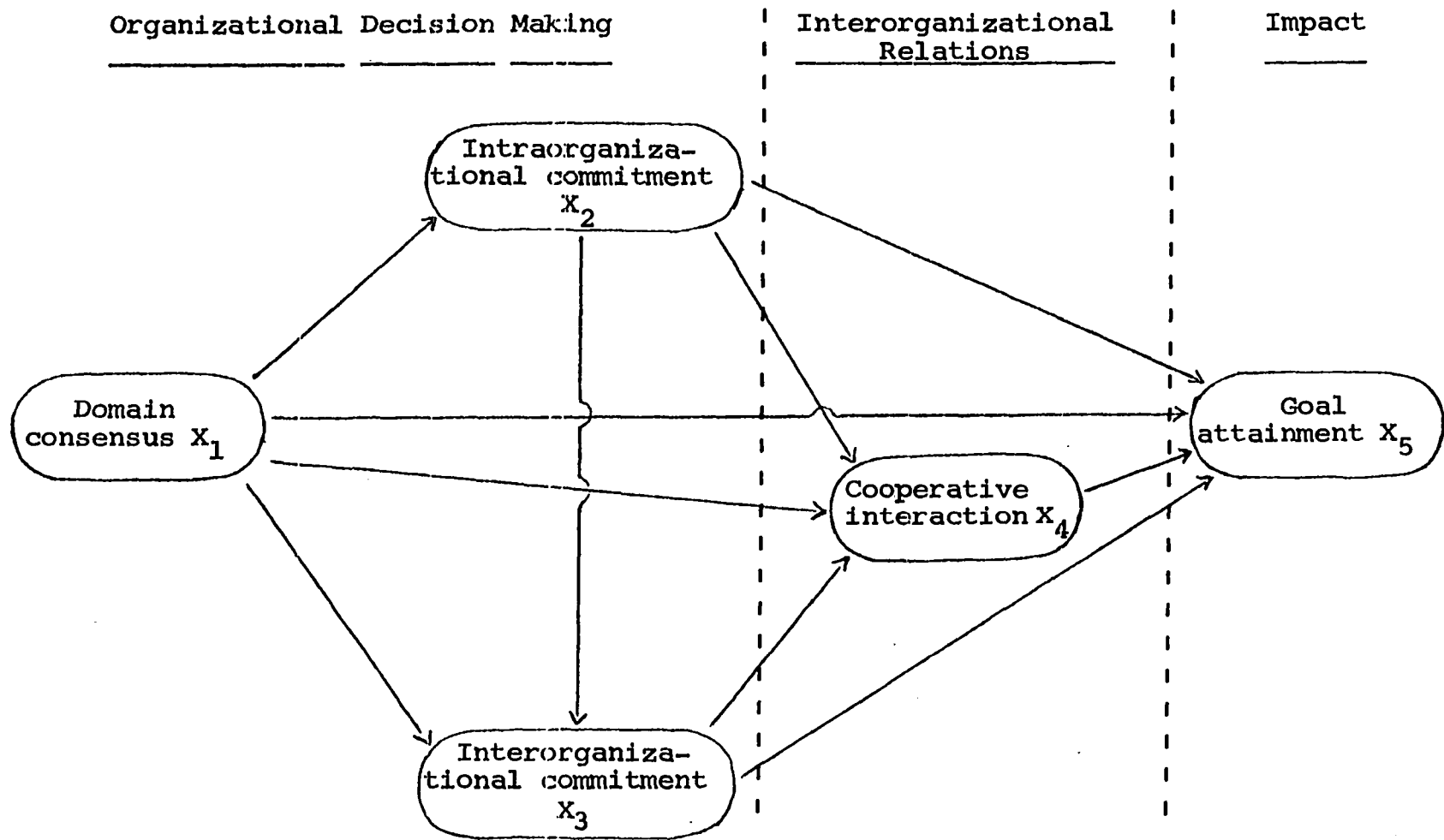


Figure 2.1. A conceptual causal model of interorganizational relations in explaining organizational goal attainment

making factors, which can be subcategorized into domain consensus, intraorganizational commitment, and interorganizational commitment. It is also postulated that the organizational decision making variables are causally related to the cooperative interaction.

In this study a backward formulation procedure is used in the development of the general hypotheses and the causal model. The backward formulation procedure starts with the dependent variable in the model and works backward to the exogenous variables.

The Dependent Variable

Goal attainment of development related organizations

There are two major approaches or models to the study of organizational goal attainment. The first model is referred to as "the traditional approach," "the goal model," "the machinery model," or "the rational model" (Etzioni, 1964; Yuchtman and Seashore, 1967; Price, 1970, 1972). The second approach can be referred to as the system model (Yuchtman and Seashore, 1967; Etzioni, 1964; Ghorpade, 1970; Parsons, 1960).

The goal model generally defines a goal as "a desired state of affairs which an organization attempts to realize ..." (Etzioni, 1964:6). Yuchtman and Seashore (1967:892) indicate that the goal model is based on two assumptions:

(1) that complex organizations have an ultimate goal toward which they are striving, and (2) that the ultimate goal can be identified empirically and progress toward it measured. This approach focuses mainly on official goals and the degree of attainment of those goals.

The goal model usually defines organizational effectiveness in terms of the degree of goal attainment. The greater the degree to which an organization achieves its goals, the greater effectiveness (Price, 1972:3). The definition of goals becomes important because effectiveness is defined on the basis of the level of goal achievement.

One of the major problems with the goal approach is that organizational goals are difficult to operationalize because of the frequent confusion and lack of agreement on what stated goals really mean to an organization. Many empirical studies have been based on the goal approach, but the model has been severely criticized because of its methodological and theoretical limitations (Yuchtman and Seashore, 1967; Price, 1970; Etzioni, 1964; Georgapoulos and Tannenbaum, 1957; Warner, 1967).

The system model or system resource approach focuses on the relationship between the organization and its environment (Thompson and McEwen, 1958; Parsons, 1960; Katz and Kahn, 1966; Terreberry, 1968; Thompson, 1967; Perrow, 1965; Yuchtman and Seashore, 1967). The system

approach appears to equate organizational goal attainment in terms of its effectiveness with the extent to which an organization has been able to acquire resources from its environment. Consequently, organizational environment has been treated as the context which generates constraint forces which influence an organization's functions and performances.

Yuchtman and Seashore (1967:894) define goal not as an ideal state but as courses of action imposed on the organization by various forces in its environment. Parsons (1960) defines organization as a social system which is deliberately constructed and reconstructed to seek specific goals or values. Goal attainment of any organization is considered to be the relationships that exists between a social system (organization) and the relevant parts of the external situation in which the organization operates.

Etzioni (1960, 1964) also distinguishes between the goal model and the system model when studying organizational effectiveness. The first approach, the goal model, considers organizational effectiveness by measuring performance against stated public or private goals of the organization. The second approach, the system model, starts with the assumption that "some means have to be devoted to such non-goal functions as services and custodial activities..." (Etzioni, 1960:261). These services and activities are not goal-

related, but they are functional and increase organizational effectiveness. The system model can be divided into two types: (1) the survival model which looks at a minimal set of requirements for organizational existence and maintenance, and (2) the effectiveness model which looks at supportive functions for the organization relative to the achieving of given goals, as well as to survival. Etzioni's latter model will be incorporated in the conceptualization of organizational goal attainment in this dissertation.

The goal setting concept developed by Thompson and McEwen (1958) is more useful than the traditional goal approach for understanding the interaction of organizations. The goal setting concept related directly to the pattern of organizational relations which a focal organization establishes and maintains with external organizations. They point out that an organization differs in the degree of control it possesses over its environmental relations. An organization has to produce outputs useful or acceptable to its environment in order to gain their support. They maintain that, "because the setting of goals is essentially a problem of defining desired relationships between an organization and its environment, change in either requires a review or perhaps alteration of goals" (Thompson and McEwen, 1958:23).

Parsons (1956a, b) has theorized that every organization has to solve four universal problems in order to survive

and be effective. These problems, referred to as the AGIL model, consist of adaptation, goal attainment, integration, and latent pattern maintenance. Adaptation refers to the problem of securing needed resources for the attainment of organizational goals. Goal attainment deals with the mobilization of resources by fitting the means to the ends. Integration is concerned with the internal problem within the system pertaining to the interrelationships of the subsystems. Finally, latent pattern maintenance deals with the main functional patterns of operation within the system such as harmonizing and developing individual commitment to organizational goals. In Parsons' AGIL framework, both adaptation and goal attainment deal exclusively with the external system while the last two deal with the internal system. The first part of Parsons' model is the central concern of this dissertation. The goal attainment and cooperative interaction of development related organizations is the organizational phenomena which need to be investigated and explained.

The system model is considered in this dissertation to be an appropriate conceptual tool by which goal attainment of development related organizations can be determined and evaluated. Several writers have regarded the system model or system resource model as one that determines the goal

attainment or effectiveness relative to the acquisition of scarce and value resources (Price, 1968:2; Yuchtman and Seashore, 1967:897; Ghorpade, 1970:34).

Since the development related organizations were established, they have continued to operate in search for satisfying means to achieve their goals. These organizations exist in relation to other organizations in a county so they are interdependent on one another. They must adapt to their environment in which they are a part and function in relation to their environment.

In this dissertation, the focal organization's goal attainment is defined as the degree of effectiveness of the focal organization in achieving its goals evaluated by the organization set. The perception of the top administrator of each organization in the organization set regarding the effectiveness of the focal organization in achieving its goals will be used as an indicator of the organizational goal attainment variable.

The Independent Variables

Cooperative interaction

Only during the last two decades has the attention of researchers turned to the study of interorganizational phenomena. There is now an increasing amount of literature being developed in this area (Evan, 1966; Litwak and Hylton,

1962; Thompson, 1967; White, 1973; Yuchtman and Seashore, 1967; Reid, 1964; Klonglan et al., 1972; Clark, 1965; Levine and White, 1961; Warren, 1967; Marrett, 1971; Turk, 1970). Interorganizational processes are some of the most basic social processes, and an understanding of them is important to an understanding of society itself and the relationships between societies (Tropman, 1974:144).

Several theoretical perspectives have been used to study and explain interorganizational phenomena. Some of these perspectives include: (1) open-systems model (Parsons, 1960; Katz and Kahn, 1966; Baker, 1969; Baker and Schulberg, 1968; Emery and Trist, 1965); (2) exchange model (Levine and White, 1961; White et al., 1971; Vlasak, 1963); (3) organization set model (Evan, 1966); (4) cooperation or coordination model (Litwak and Hylton, 1962; Litwak, 1969; Leadley, 1969); and (5) conflict or competitive model (Miller, 1958; Hollister, 1970; Maniha and Perrow, 1965). The first two models will be focused on and incorporated into the conceptualization of the cooperative interaction variable.

Open systems model Some aspects of the open systems and system approaches to the study of interorganizational analysis have been discussed in the earlier section. The basic assumption of the open systems approach assumes that organizations are open systems are conceived to depend upon their external elements in their environment for resources

or inputs which they, in turn, transform into products or outputs.

Open systems theorists (Katz and Kahn, 1966; Parsons, 1960; Buckley, 1967) and other writers (Levine and White, 1961; Thompson, 1967; Yuchtman and Seashore, 1967; Thompson and McEwen, 1958) conceive these mutually beneficial transactions for goal attainment as exchange.

Katz and Kahn's (1966:16-17) discussion of organizational interaction within the open systems framework write that "social organizations are flagrantly open systems in that the input of energies and the conversion of output into further energetic inputs consist of transaction between the organization and its environment."

Emery and Trist (1965) conceive many processes in the environment as causally related to exchanges between the organization and its environment. They suggest that open systems analysis framework is needed. An understanding of organizational behavior requires the knowledge of: (1) processes within the organization--the area of internal interdependencies; (2) exchanges between the organization and its environment--the area of transactional interdependencies; and, (3) processes through which parts of the environment become related to each other--i.e., its causal texture (Emery and Trist, 1965:22).

Parsons (1968:460) theorizes that "a social system,

like all living systems, is inherently an open system engaged in the processes of interchange (or input-output relations) with its environment." Thompson (1967:10) defines "complex organizations as open systems, hence indeterminate and faced with uncertainty, but at the same time as subject to criteria of rationality and hence needing determinateness and certainty." Baker (1969) conceptualizes an organization as an open system in which it depends upon its exchanges with the environment outside its boundary for its growth and viability.

Thompson and McEwen (1958) classify organizational strategies for dealing with environments as whether they are cooperative or competitive with respect to organizational goal setting. Cooperative strategy is subcategorized as bargaining, cooptation and coalition. Bargaining refers to "...the negotiation of an agreement for the exchange of goods or services between two or more organizations." Cooptation refers to "...the process of absorbing new elements into the leadership or policy determining structure of an organization." Coalition refers to "...a combination of two or more organizations for a common purpose." In their model, organizational goals are conceptualized as growing out of interaction between the organization and its environment. Several researchers offer other schemes for delineating types of relationships between organizations that appear

to conform at a general level to Thompson and McEwen (Hall and Clark, 1969; Finley and Capener, 1967; Aiken and Hage, 1968; Leadley, 1969; Finley, 1970).

Evan (1966) discusses the relation of the focal organization and its organization set within the open systems framework. He conceives this relation as mediated by (1) the role-sets of its boundary personnel, (2) the flow of information, (3) the flow of product or services, and (4) the flow of personnel. Interorganizational cooperation is conceived as transactions that occurs within the role-sets of boundary personnel.

Exchange model This theoretical model advocated by Homans (1958), Thibaut and Kelley (1959) and Blau (1964) for analyzing interpersonal behavior has been applied to the interorganizational analysis by Levine and White (1961), Reid (1964), Thompson (1967), Finley (1970), Dillman (1970) and several others. Extension of the exchange concept to interorganizational behavior to explain the occurrence of relationships between organizations appears to associate exchange theory with open systems theory. Levine and White (1961), Eichhorn and Wysong (1968), Vlasak (1963), Finley (1970), Klonglan et al. (1969), among others use the modified notion of exchange to investigate relationships between organizations. These authors consider cooperation as exchange and assume cooperation is desirable in interorganizational

relations.

Interorganizational cooperation based on exchange can be seen in many ways: information exchange, resource exchange, transfers of funds or clients or input-output exchange, and the sharing of facilities (Thompson, 1962; Reid, 1970; Levine and White, 1961; Aiken and Hage, 1968; Dillman, 1969; Klonglan et al., 1969). Exchanges between organizations are viewed as a complement of the need of scarce resources for accomplishment of organizational goals. The underlying assumption, either explicitly or implicitly, of interorganizational cooperation is concerned with certain needs which must exist in order for interaction to take place (Levine and White, 1961; Parsons, 1951; Litwak and Hylton, 1962; Reid, 1964, 1970; Litwak, 1969).

Levine and White (1961) and Levine et al. (1963) employ the concept of exchange to study the relationships between health and welfare agencies by viewing them as being engaged in an exchange system. They define organizational exchange as "any voluntary activity between two organizations which has consequences, actual or anticipated, for the realization of their respective goals or objectives" (Levine and White, 1961:588). Types of elements exchanged among health organizations includes labor services, cases, funds, equipment, and information. Their conceptualization of an exchange system provides a means for explanation of the variance in the types and

frequencies of interrelations among organizations. Other researchers' models using the exchange framework appear to conform at a theoretical level to Levine and his colleagues (Dillman, 1969; Vlasak, 1963; Finley, 1970; Vacin, 1972; Klonglan et al., 1969; Reid, 1964; Aiken and Hage, 1968; Litwak and Hylton, 1962; Pruden, 1969).

Vlasak (1963) uses the exchange conceptual framework to analyze interaction patterns among 38 community agencies engaging in the provision of rehabilitative services to chronically ill handicapped persons. He found the patterns of relationships were largely determined by the differential needs of organizations for scarce resources which have to be obtained through exchange with others in the environment, if the organization was to survive and achieve some minimum level of its goals.

Reid (1970) suggests that a "scarcity of means" is a necessary condition before interorganizational cooperation will take place. He points out that "...theorists seem to agree that cooperation among a set of organizations is not likely to take place unless at least one organization has objectives it cannot meet with available or internally accessible instrumentalities, whether these be called functions, resources or whatever" (Reid, 1970:96). Thus cooperation becomes a vehicle to relieve such scarcities, and organizations may cooperate with others to obtain necessary

resources for goal attainment.

Klonglan et al. (1969) use a "reciprocity" and "costs and benefits" framework to explain the success and failure of a focal organization and its relationships to members of its organization set. Baker and Schulberg (1968) and Baker (1969) employ "deficits" and "surpluses" of "inputs" and "outputs" to study the changes in a focal organization in relations to changes in its environment.

Eichhorn and Wysong (1968) discuss the problem of whether organizations interact with one another primarily to realize goals or to survive. They concluded that inter-organizational interaction was based on implementation of the organization's goals, but it also had positive consequences for survival.

Several works can be subsumed under the exchange perspective. They are those of Litwak and Hylton (1962), Emery and Trist (1965), Thompson (1967), Rubin and Stinchcombe (1967), Litwak (1969), and Aiken and Hage (1968). These authors view organizations and their relationships to the environment as interdependence. Type of interdependence existing between organizations can be seen as a criterion for classifying interaction as cooperation or opposition. Litwak and Hylton (1962:401) refer to interdependence as the existence of a condition such that two organizations must take each other into account if they are to accomplish their

goals. They classify interdependence into two types: facilitative and competitive. Their model of interorganizational relations focuses on factors under the conditions of unstructured authority which explain cooperation among organizations. Included in their model are relations among organizations under conditions of partial conflict.

Litwak (1969) views cooperation as many kinds of linkages among formal organizations. He suggests that there are certain conditions necessary for linkages to occur: (1) interdependence; (2) aware of interdependence; and (3) possess enough resource to make exchange possible. Litwak's theoretical framework is applied to develop a number of multivariate hypothesis attempting to predict, under certain conditions, the most effective form of linkage.

Thompson (1967) employs the modified notion of exchange to organizational behavior within the open systems framework. Thompson views exchange between organizations as a mode of organizational interaction which organizations use in an effort to manage the constraints and contingencies that are posed by relevant elements in their environments. Like others, he conceives formal organizations to be embedded in a matrix of relationships with other institutions, organizations and individuals on which they are dependent for goal attainment. He recognizes the focal organization and its interdependence on other organizations in the task environment

as they are relevant for goal setting and goal attainment. For that reason development related organizations enter into cooperative interaction with one another in order to acquire inputs (i.e., resources, funds, information) to develop their outputs (goal attainment).

Aiken and Hage (1968) examined an organization's relationship with its environment in terms of the interdependence which arose through joint cooperative programs with other organizations and intraorganizational characteristics. After they studied 16 social welfare and health organizations, they assumed that organizations were "pushed" into interdependencies with other organizations for a need of resources, "...not only money, but also resources such as specialized skills, access to particular kinds of markets and the like" (1968:914). They suggested that cooperation and conflict can be incorporated into the same model of organizational interdependence.

Cooperative interaction patterns of a focal organization's exchange with members of its organization set in the task environment for acquisition of resources is viewed as organizational interdependence. The extent to which a focal organization has concentrated its dependence on members of its organization set for input of those necessary resources, e.g., information, funds, equipment and personnel, influences its decision making about the level of cooperative

interaction with any particular organization.

Open systems and exchange theoretical perspectives have been useful to guide research on interorganizational relations. These perspectives apply to rural development when there is a continuous outflow of products and services of the organization's action back to the environment. It is conceptualized that the focal organization is an open system and it cannot achieve its goals solely by carrying out its functions but it has to use the services or resources of other organizations to accomplish its goals.

Exchange between development related organizations can be regarded as indicators of costs and benefits. The transfer of a certain tangible resource may be considered as cost under some conditions and as a benefit or a reward under others. Exchanges between organizations may be classified as unilateral or bilateral types. The unilateral type refers to the flow of resources from one organization to another based on their agreement on a certain set of criteria for the allocation of resources and benefit to both organizations simultaneously. The bilateral type refers to the flow of resources when both organizations send and receive resources and are benefited simultaneously. Both types of exchange are incorporated into the cooperative interaction concept developed in this study.

Cooperative interaction, as defined in this study,

refers to exchange, both unilateral and bilateral, which occurs between organizations and is assumed to have beneficial effects on goal attainment.

Cooperative interaction is considered to represent a quid pro quo transaction between the focal organization and members of its organization set for successful goal achievement. The focal organization's cooperative interaction in this study is focused on a horizontal type relations (Warren, 1967) where all the interacting units are not formally part of a larger inclusive system. The competitive and conflict aspects are excluded from this study. The level of cooperation is a result of the efforts of a focal organization and members of its organization set to manage their interdependence, making the capacity of a focal organization to engage in exchange relationships a necessary component of organizational interdependence.

The explication of the cooperative interaction concept in this study is based on the works of Finley (1970), Leadley (1969), Thompson and McEwen (1958), Aiken and Hage (1968) and Klonglan et al. (1972). Indicators of cooperative interaction are: (1) information exchange--providing or receiving information; (2) resource exchange--providing or receiving resources (bargaining); (3) exchange of members through overlapping boards or councils (cooptation); and (4) participation in joint efforts or programs.

It is conceptualized that cooperative interaction between the focal organization and members of its organization set relating to development programs or activities will have beneficial impact upon goal attainment. Thus, the relationships between cooperative interaction and goal attainment can be seen in terms of cause and effect, that is, the more the cooperative interaction, the higher the organizational goal attainment.

Based on the above assumption, the relationship between cooperative interaction and goal attainment is formulated in the causal model, making the cooperative interaction the first independent variable to enter the causal model. The arrow (\rightarrow) from cooperative interaction to goal attainment in Figure 2.1 indicates the cause and effect relationship that cooperative interaction is thought to produce goal attainment. The general hypothesis can be stated as:

G.H. 1: If the focal organization's cooperative interaction is high, then its goal attainment will be high.

Intraorganizational commitment

In their discussion of organizational commitment, Klonglan et al. (1971) point out that:

Organizational commitment may be seen from two perspectives: (1) the actual level of current involvement, and (2) the predisposition to become involved in the future. Furthermore, when

the particular content of commitment is introduced a second and overlapping set of dimensions may be added to the general concept of commitment: an organization may have commitment to become involved by (1) themselves, or (2) with others. These concepts may be termed intraorganizational commitment and interorganizational commitment respectively. Thus, we have four dimensions of commitment to become involved in smoking and health programs: actual and predisposed intraorganizational commitment, and actual and predisposed interorganizational commitment (1971:32).

Organizational commitment of development related organizations, following Klonglan and his associates (1971), can be divided into two broad types. The first type is intraorganizational commitment or an isolated effort of an organization to carry out rural development programs and activities. This concept will be discussed in this section. The second type deals with interorganizational commitment or an interrelated effort between organizations in carrying out rural development programs and activities. The discussion of this concept is presented in the next section.

The concept of intraorganizational commitment is defined by Klonglan et al. (1973:4) as "the degree to which an organization believes a particular problem (i.e., smoking and health) is an important one and is willing to become involved in the problem." A similar definition is given by Yep (1973:3) as "an evaluation of how committed in terms of resource allocation each of the relevant organizations is to the focal field." Several writers discuss this concept

in the context of the amount of an organization's resources being or possibly being allocated to certain problem areas in interorganizational efforts (Finley, 1970; Aiken and Hage, 1968; Rogers and Glick, 1973b). Intraorganizational commitment is considered a factor that will affect the focal organization's decision to interact by itself in rural development programs and activities.

This concept is defined in this study as the extent to which an organization is or is willing to become committed to rural development by itself in isolation from other organizations. The indicators for intraorganizational commitment are based on reports by the top administrators of the development related organizations concerning their present involvement or will be involved in rural development activities and the extent to which the organizations have offered rural development services at a county level.

Klonglan and Paulson (1971) suggest that before organizations can be expected to engage in cooperative efforts, some commitment to development per se has to be present. In their research of health organizations, Klonglan et al. (1971, 1973) hypothesized a positive relationship between intraorganizational commitment and past organizational interaction. In both studies the results indicate that intraorganizational commitment was not significantly related to past organizational interaction. The relationship

between intraorganizational commitment to cooperative interaction has not been systematically studied in other empirical arenas.

From the review of the literature, the existing empirical research did not sufficiently support the relationships between intraorganizational commitment and organizational interaction. However, based on the earlier theoretical discussion, there is reason to believe that intraorganizational commitment is a component condition necessary for cooperative interaction and achievement of organizational goals. Therefore, in this dissertation it will be assumed that intraorganizational commitment which means an organization initiates its own activities relating to rural development tasks, will be causally related to level of cooperative interaction and organizational goal attainment. A causal link between intraorganizational commitment to cooperative interaction and goal attainment is articulated in the causal model. The assertion of cause and effect relationships from intraorganizational commitment to cooperative interaction and goal attainment means that: (1) the more the intraorganizational commitment, the higher the cooperative interaction; and, (2) the more the intraorganizational commitment, the higher the goal attainment.

Intraorganizational commitment is the second independent variable to enter into the causal model. The

arrows (→) from intraorganizational commitment to cooperative interaction and goal attainment in Figure 2.1 mean that this variable is thought to cause or produce cooperative interaction and goal attainment.

The general hypotheses formulated on the above discussion are as follows:

G.H. 2: If the focal organization's intraorganizational commitment is high, then its cooperative interaction will be high.

G.H. 3: If the focal organization's intraorganizational commitment is high, then its goal attainment will be high.

Interorganizational commitment

Klonglan et al. (1973:4) define this concept as "the degree to which an organization is committed to work with other organizations on the particular problem (i.e., smoking and health), rather than operating alone." They point out that organizations must also be willing to work with other organizations on the problem before it can be successfully involved in cooperative efforts (1973:4). Other writers have included this concept in their theoretical discussion and seem to imply its importance consistent with Klonglan and his associates (Aiken and Hage, 1968; Yep, 1973; Finley, 1970; and Pruden, 1969).

Interorganizational commitment as defined in this study refers to the degree to which an organization is or is willing to become committed to interagency rural development activities. It is assumed that if the focal organization is highly committed to work with other organizations in rural development, it will increase its level of cooperative interaction and organizational goal attainment. The indicators for interorganizational commitment are based on the reports from the top administrators of the development related organizations of their organizations' involvement or willingness to be involved with other organizations and on the extent of past contributions of resources to rural development interagency programs and activities in their counties.

Based on the above discussion, it is reasonable to assume that interorganizational commitment has beneficial effects upon cooperative interaction and goal attainment of the focal organization. A causal link between interorganizational commitment to cooperative interaction and goal attainment is formulated in the causal model. The assertion of the existence of cause and effect relationships from interorganizational commitment to cooperative interaction and goal attainment means that: (1) the more the interorganizational commitment, the higher the cooperative interaction; and, (2) the more the interorganizational

commitment, the higher the goal attainment.

Interorganizational commitment is the third independent variable to enter into the causal model. The arrows (→) from interorganizational commitment to cooperative interaction and goal attainment in Figure 2.1 indicate these cause and effect relationships. Empirical support can be found in various research studies for those posited relationships: Pruden (1969) found evidence to support the proposition that "as level of interorganizational linking process increases, the level of interorganizational exchange increases;" although Klonglan and Paulson (1971), Klonglan et al. (1971, 1973) found a low correlation between interorganizational commitment and organization interaction. The next two general hypotheses can be stated.

G.H. 4: If the focal organization's interorganizational commitment is high, then its cooperative interaction will be high.

G.H. 5: If the focal organization's interorganizational commitment is high, then its goal attainment will be high.

Domain consensus

The concepts of domain and domain consensus are important in understanding interorganizational behavior (Braito et al., 1972; Aldrich, 1970; Levine and White,

1961). Several writers have recognized the importance of these concepts in interorganizational analysis (Thompson, 1967; Warren, 1969; Levine et al., 1963; Benson, 1972).

Levine and White (1961) define the domain of a health organization as:

...the specific goals it wishes to pursue and the functions it undertakes in order to implement its goals. In operational terms, organizational domain in the health field refers to the claims that an organization stakes out for itself in terms of (1) diseases covered, (2) population served, and (3) services rendered (1961:597).

Evaluation of organizational domain claims can be seen from four points of view: (1) the members of the community or society at large; (2) the representatives of the society (Selznick, 1949); (3) the focal organization to the members of its set or networks (Evan, 1966; Thompson, 1967); and, (4) the members of the organization set or networks to the focal organization (Evan, 1966; Dill, 1958; Thompson, 1967). The fourth audience of evaluators, the members of an organization set, is used in this study. The evaluation of the focal organization's domain claims by members of its organization set is called domain consensus.

Domain consensus is based on knowledge and assessments of organizational legitimacy (Levine and White, 1961; Thompson, 1967). Domain consensus between two health organizations is defined as "the degree to which they agree and accept each other's claims with regard to problems or

diseases covered, services offered and population served" (Levine et al., 1963:1191). Levine and White have posited domain consensus as one of the three determinants of exchange. They view that "exchange is contingent upon prior domain consensus: (Levine and White, 1961:588). Presumably, any kind of cooperative activity can be conceptualized as exchange (Reid, 1970:88). For this reason, domain consensus is conceptualized as an important condition by which allocation of resources between organizations may take place.

Concerning the relationship between domain consensus and goal attainment, Levine et al. (1963:1191) maintains that "the degree of acceptance of the focal organization's goals as legitimate or useful by the organizations in the external environment with which the focal organization interacts for the explicit purpose of completing a task." Several writers have assumed that organizations are interdependence on one another in their environment and, thus, share scarce resources (Litwak and Hylton, 1962; Litwak, 1969). For this reason, an organization must exchange resources with others in order to achieve its goals.

Thompson (1967) discusses organizational domain as a useful concept for defining the relationship that a focal organization establishes with its environment. Like Levine and White, he points out that domain is systematically

related to organizational resource acquisition. Thompson (1967) defines domain consensus as:

a set of expectations, both for members of an organization and for the others with whom they interact about what the organization will and will not do. It provides an image of the organization's role in a larger system, which in turn serves as a guide for ordering of action in certain directions and not the others (1967: 29).

Thompson's view is that all organizations have to establish a domain. Only if an organization's domain claims are acknowledged by those organizations that can provide necessary support, can its domain be operational. He assumes that the focal organization provides resources which are evaluated as desirable by set organizations, and if domain consensus exists between them, exchange relationships may take place.

Warren (1969) has suggested domain as a key variable in decision making. Domain is the organization's locus in the interorganizational network, including its legitimate "right" to operate in specific geographic and functional areas and its channels of access to task and maintenance resources (Warren, 1969:4). Following Warren's definition, the organization not only has the right to perform something but also has accessibility to necessary resources for the attainment of its goals.

Braito et al. (1972) have indicated that interorganizational analysis, either implicitly or explicitly, is

concerned with the concepts of domain and domain consensus. They concluded in their research study that "high or low domain consensus is not necessarily a characteristic of particular organizational structure but is primarily a function of an organization's domain claim or claims to a problem area which it set out for itself" (1972:187). They also found domain to be related to endorsement and resource allocation. They suggested that an organization involved in a certain problem tended to endorse other organizations as "should" be involved in that problem area.

In this dissertation, domain consensus is defined as the degree of agreement recognized by set organizations on the question of whether or not the focal organization should be involved in rural development. A high domain consensus exists when there is a high degree of recognition or acceptance by set organizations of the focal organization's domain claims in rural development. Establishment of the acceptance of domain claims will enable the focal organization to link with other organizations for resources necessary for its goal attainment. Likewise, domain consensus in respect to the focal organization acknowledged by members of its organization set must account for some of the explanation of cooperative interaction (Thompson, 1967; Levine and White, 1961; Braito et al., 1972; Dillman, 1969; Vacin, 1972; Klonglan et al., 1972; Finley, 1970; Litwak and Hylton,

1962; Hall and Clark, 1969).

On the basis of the above considerations it is conceptualized that domain consensus has beneficial effects upon cooperative interaction and goal attainment of the focal organization. A causal link from domain consensus to cooperative interaction and goal attainment is formulated in the causal model. The assertion of the existence of cause and effect relationship from domain consensus to cooperative interaction and goal attainment means that: (1) the more the domain consensus, the higher the cooperative interaction; and, (2) the more the domain consensus, the higher the goal attainment.

Domain consensus is the last independent variable to enter into the causal model. The arrows (\rightarrow) from domain consensus to cooperative interaction and goal attainment in Figure 2.1 means that this variable is thought to cause or produce cooperative interaction and goal attainment.

Following the above discussion the last two general hypotheses can be stated as follows:

G.H. 6: If the focal organization's domain consensus is high, then its cooperative interaction will be high.

G.H. 7: If the focal organization's domain consensus is high, then its goal attainment will be high.

The Path Model

Path analysis has proved to be a useful technique to evaluate assymetrical cause and effect relationships of a set of variables in the causal model (Wright, 1934; Duncan, 1966; Heise, 1969; Warren et al., 1968; Mulford et al., 1971; Paulson, 1971). A causal model consists of the articulation of relationships between all independent and dependent variables.

A path analysis has several advantages over multiple regression analysis. These advantages have been pointed out by Mulford et al.

First, variables may exist in complex relationships or networks with each other. Path analysis attempts to measure and describe these networks. Second, path analysis examines the direct and indirect causal relationship among variables on each other. Thus, path analysis can serve as a guide in evaluative research by providing more information about the nature of the relationship among the variables (1971: 13).

In the previous section, the variables of organizational decision making (domain consensus, intraorganizational commitment and interorganizational commitment) and interorganizational relations (cooperative interaction) and their causal relations to organizational goal attainment have been specified. The causal relationships between the organizational decision making variables and interorganizational relationships have also been articulated. The only

relationships between the independent variables not yet examined are those among domain consensus, intraorganizational commitment and interorganizational commitment. Their relationships will be formulated in this section to make the causal model complete.

Klonglan's et al. (1971:32) discussion of organizational involvement states that "involvement can be viewed from two general perspectives--the level of commitment within an organization in terms of involvement in the area of smoking and health, and the level of consensus among organizations as to which organization should be involved in the area of smoking and health." They assume that these two factors are interrelated to each other and both are conceived to be related to interorganizational interaction.

An organization may be highly committed in its own system to rural development programs (intraorganizational commitment), however if it does not receive support from other organizations it will be less successful than if it had their support (domain consensus). In addition, an organization which participates in interagency programs may not be successful if members of its organization set do not feel that it should be involved in these types of activities. It is assumed that the results of interorganizational commitment in terms of involvement in development efforts will or will not be successful depending

upon the contingent of prior domain consensus. It is also assumed that if the focal organization has made some type of commitment to rural development within its own system the probability of its participation in rural development interagency programs and activities could be expected to be high.

Klonglan et al. (1971, 1973) have posited the existence of relationships between: (a) domain consensus and intra-organizational commitment, (b) domain consensus and inter-organizational commitment, and (c) intraorganizational commitment and interorganizational commitment. The results of their studies supported the predicted hypothesized relationships.

Following the above discussion, the author asserts the existence of cause and effect relationships between: (a) domain consensus and intraorganizational commitment; (b) domain consensus and interorganizational commitment; and, (c) intraorganizational commitment and interorganizational commitment.

A causal chain shown by the arrows (\rightarrow) from domain consensus to intraorganizational commitment and interorganizational commitment in Figure 2.1 indicate that domain consensus is thought to cause both variables. The causal link between intraorganizational commitment and inter-organizational commitment represented by the arrow (\rightarrow)

in Figure 2.1 also indicates that intraorganizational commitment is a cause that influences interorganizational commitment. Thus, the causal orderings of all the independent and dependent variables in the conceptual model are articulated. In the system of causal relations, domain consensus is considered to be an exogenous variable. This means that domain consensus is determined only by variables outside this causal model.

To summarize briefly, the conceptual model of inter-organizational relations in explaining organizational goal attainment of rural development related organizations has been described. The seven two variable general hypotheses (G.H.) have been formulated and are presented in Figure 2.2 where this same hypothesis number used can be located for reference in the text. The three paths developed in this section and the seven general hypotheses represent the relationships among the causal ordering of variables of the hypothesized paths in the model. These hypothesized paths are shown by the arrows found in Figure 2.2.

In the chapters which follow, variables theorized in the model will be operationalized so that empirical hypotheses can be constructed to test the general hypotheses and the path model.

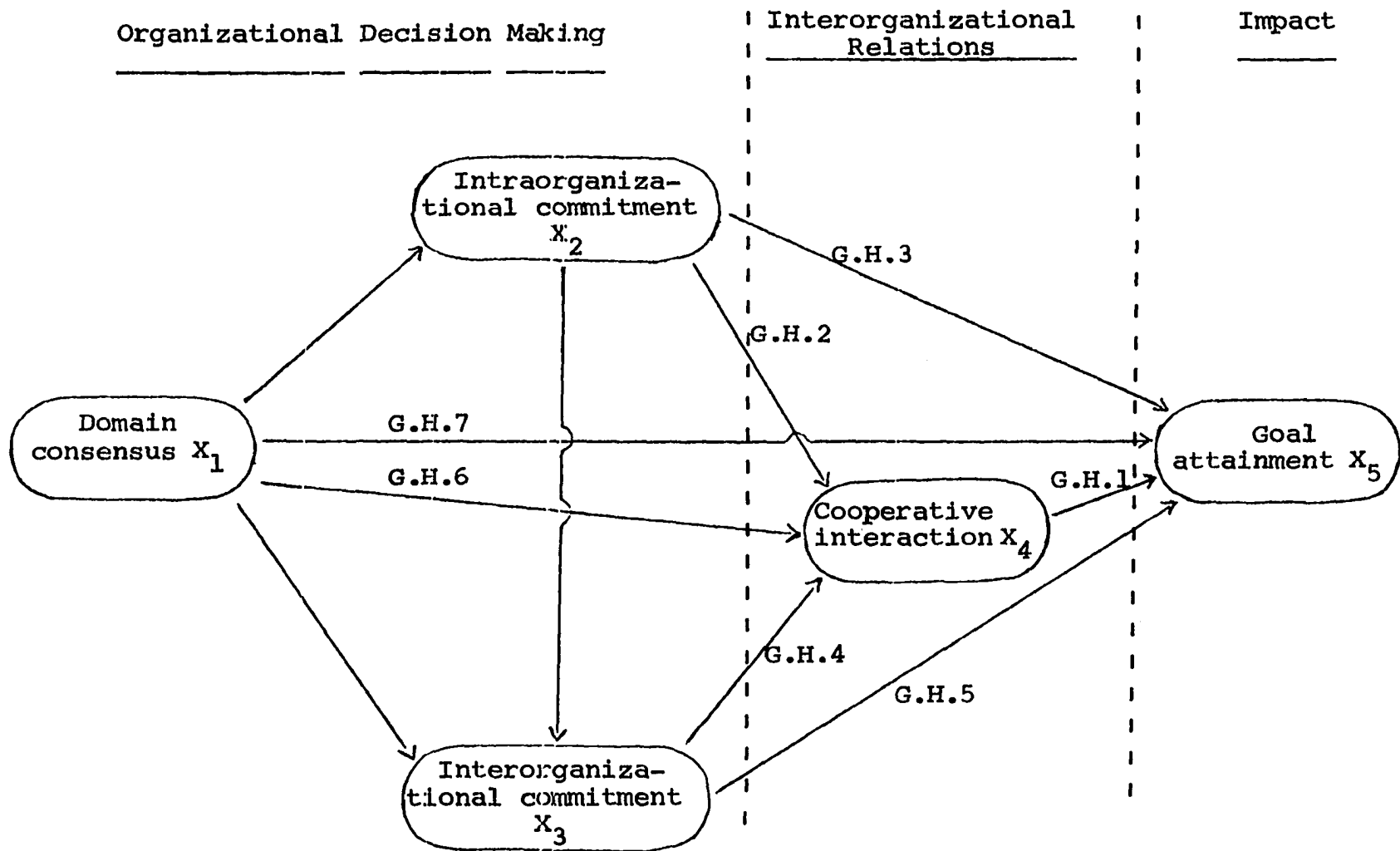


Figure 2.2. A conceptual path model of interorganizational relations in explaining organizational goal attainment. The two variable general hypotheses and paths are shown by G.H. numbers and directional arrows respectively

CHAPTER III. METHODOLOGY

Introduction

The hypotheses and theoretical model developed in Chapter II were formulated at a general level. In the present chapter, the concepts included in the general hypotheses and the model are operationalized at the empirical level. The methods and procedures of this study are presented in four sections. The discussion of these methodological procedures included are: (1) population and sample; (2) collection of data; (3) operationalization and measurement; (4) empirical and statistical hypotheses; and (5) methods of analysis.

The data in this study represent a portion of the data collected during August and September, 1971, as part of the rural development research project directed by Dr. David L. Rogers, assistant professor in the department of Sociology and Anthropology at Iowa State University. One of the major objectives of the study was to investigate organizational coordination in rural development, with an emphasis on the organization of rural development committees in local communities.

Population and Sample

Population and sample of counties

Sixteen of 99 counties in Iowa were included in this study. A purposive and stratified sample techniques were used to select sample counties for this study. The stratified techniques used in selecting the sample included population and population change, geographical location, and level of poverty in the county. Some counties were primarily rural and some had urban growth centers (Wapello, Cerro Gordo and Dubuque counties). On the basis of the sampling factors mentioned above, four counties adjacent to each of the three counties with urban growth centers and Story County were selected to make the sample representative of the entire state. The inclusion of Story County in the sample was, in addition to the above criteria, because of its accessibility to the researchers. Counties included in the sample are: (1) Cerro Gordo, (2) Clayton, (3) Davis, (4) Delaware, (5) Dubuque, (6) Fayette, (7) Floyd, (8) Hancock, (9) Harding, (10) Jackson, (11), Jefferson, (12) Mahaska, (13) Monroe, (14) Story, (15) Wapello, and (16) Wright. Figure 3.1 presents the 16 counties selected in the sample.

Population and sample of development related organizations

The choice of sample organizations was based on two major criteria: (1) organizations currently engaging or participating in development related activities and programs, (2) organizations with county-wide programs and responsibilities. These conditions were also used to determine the focal field of rural development. The focal field does not include all possible organizations in the county, but only organizations that were either engaging in or could participate in rural development because of their current goal structure.

The reports by Rogers (1972) and Rogers and Glick (1973b) should be consulted for a more complete description of the empirical setting of the research and of the sampling techniques employed.

Organizations organized on an area or a district basis were also considered under special procedures in the selection of organizations. Some of the organizations in the sample had an area or a district offices but were responsible for several counties. In these instances, administrators from district agencies located in sample counties were asked to evaluate only the agencies in the county in which the district office was located. On the other hand, respondents of organizations in counties where the district office was included in the sample were asked

to evaluate the district office as though it existed in their county.

In a few cases the district office was not in the sample counties but had area responsibility over one or more counties which were included in the sample. In such cases, the administrator of the district office was asked to evaluate only an agency with an office located in the sample county closest to his county, while each agency respondent in the sample counties under his jurisdiction was asked about his evaluation of the district office.

The organizations studies were classified into three groups according to their administration and method of financing: (1) the U.S. Department of Agriculture Agencies (USDA) include Agricultural Stabilization and Conservation service (ASCS), Soil Conservation Service (SCS), Cooperative Extension Office (CEO), and Farmers Home Administration (FHA); (2) the state and county public agencies include County Welfare Department (CWD), Forest Service (FS), County Conservation Board (CCB), Planning and Zoning Commission (PZC), Employment Security Office (ESO), and Community Action Agency (CAA); and (3) the private and voluntary associations include Rural Electric Cooperative (REC), County Bankers Association (CBA), County Ministerial Society (CMS), County Farm Bureau (CFB), County Development Committee (CDC). Table 3.1 indicates the distribution of organizations

Table 3.1. Distribution of organizations in counties included in the sample

County No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Org. No.	CG	CT	DV	DW	DB	FY	FL	HC	HD	JS	JF	MK	MR	ST	WP	WR	
1 ASCS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
2 CAA	X	O	O	O	X	X	O	O	O	O	O	O	O	X	X	X	6
3 FHA	X	X	X	X	X	X	X	X	X	O	X	X	X	X	O	X	14
4 ESO	X	O	O	O	X	X	X	O	O	O	X	X	O	X	X	O	8
5 SCS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
6 FS	O	X	O	O	O	O	O	O	O	X	X	O	X	X	O	O	5
7 REC	O	X	X	O	O	O	O	X	X	O	X	X	X	X	O	X	9
8 CWD	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
9 CEO	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
10 PZC	X	O	O	O	X	O	X	O	X	O	O	O	O	X	X	O	6
11 CFB	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	16
12 CBA	O	X	O	X	X	X	O	X	X	X	X	O	O	X	O	O	9
13 CDC	X	O	X	X	O	X	X	X	O	X	X	X	X	X	X	X	13
14 CCB	X	X	X	X	X	X	X	X	X	X	O	O	X	X	O	X	13
15 CMS	O	X	O	O	O	O	O	X	O	O	X	X	X	O	X	O	6
Total	11	11	9	9	11	11	10	11	10	9	12	10	11	14	10	10	169

in each of the 16 counties included in the sample.

Collection of Data

Interview schedule and questionnaire

Data were collected by means of both a mailed questionnaire and structured interview schedule. The mailed questionnaire consisted of questions regarding the agency's organizational structure. The structured schedule interview consisted of questions about the agency's goals, involvement in development activities, interaction with other organizations involved in development, and involvement in rural development committees. The first draft of the interview schedule was pretested on the administrators of several agencies in counties which were not selected for the sample. Following the pretest, several changes were made in the original interview schedule.

Data collection procedures

The questionnaire was mailed to agency respondents before the structured interview was conducted. This plan was intended to simplify data collection and reduce structured interview time. The respondents were top administrators of the selected organizations which make up the organization set in each county. The personal interview was conducted during August and September, 1971. Through the techniques of field interview and mailed questionnaire,

a total of 169 organizations located in the 16 counties were contacted. Telephone calls to the respondents were made before hand to set up the time for interviews. The mailed questionnaires were collected at the time of the personal interviews.

After all the data from the mailed questionnaire and personal interviews had been collected, the data were carefully checked by the researchers for completeness. They found the responses of two organizations were too incomplete to be useful for the analysis. These organizations were County Bankers Association of Jackson County and Forest Service of Monroe County. These organizations are included in study but are treated as missing cases in the data analysis chapter.

Operationalization and Measurement

In this section each of the five concepts delineated in Chapter II are operationalized and measured. Empirical and statistical hypotheses are also stated.

Goal attainment of development related organizations

This concept is defined as the degree of effectiveness of the focal organization in achieving its goals evaluated by the organization set. The focal organization's goal

attainment¹ is operationalized as the degree to which its goals are accomplished through the perceptive evaluation of the administrators of the organization set.

Evan's (1966) organization set frame of reference was used to measure the focal organization's goal attainment. Two measures were used to assess a focal organization's goal attainment. These were the perception of a focal organization's self evaluation and the average of its set organizations' perceptions regarding the effectiveness of the focal organization in reaching its goals. The multiple measures were combined in a composite measure (Riley, 1963) to obtain an evaluation of organizational goal attainment of the focal organization. This empirical measure is called the Goal Attainment Score.

The question used to ask the respondent of the focal organization to rate its own effectiveness in attaining its goals was:

How effective do you feel that your organization has been in meeting its goals in the past year?

¹The raw score of County Bankers Association of Jackson County and Forest Service of Monroe County are not computed due to the incompleted responses previously mentioned. So, instead of a total 169 organizations, only 167 organizations raw scores of goal attainment are computed and analyzed in this study. Likewise, the raw scores of other concepts studied are based on 167 organizations (see Tables 3.3 to 3.6).

The question used to ask the set organizations' respondents to evaluate the effectiveness of the focal organization in their county was:

How effective do you feel...has been in reaching its goals?

Respondents had four response choices for each question, namely, very effective, moderately effective, slightly effective, and not effective. The four response choices were given the respective scores of 4, 3, 2, 1. It was found, however, that some respondents did not respond to the question for every organization. In those cases a score of 0 was given the no-response items.

The mean of each focal organization's goal attainment score rated by the set organizations was computed. This score was added to the focal organization's self-rating score and divided by two to form the focal organization's Goal Attainment Score. The theoretical range of the Goal Attainment Score was 1 to 4.0, with an observed range of 0.8 to 3.9 and a mean of 2.9. The distribution of the Goal Attainment Scores is presented in Table 3.2.

Cooperative interaction

It was hypothesized that if the focal organization's cooperative interaction is high, then its goal attainment will be high. Cooperative interaction is defined as exchange, both unilateral and bilateral, which occurs between

Table 3.2. Distribution of Goal Attainment Scores^a

Range	Frequency	Percent	Cumulative Frequency
0 - .99	1	.6	1
1.00-1.99	11	6.6	12
2.00-2.99	76	45.5	88
3.00-4.00	79	47.3	167

^aDoes not include scores of the two organizations which are treated as missing cases.

organizations and is assumed to have beneficial effects to goal attainment. This concept is operationalized as exchanges between the focal organization and members of its organization set in four areas: information exchange, resource exchange, overlapping boards or councils and joint efforts between organizations.

Again, Evan's (1966) organization set concept was used as a frame of reference to measure the cooperative interaction variable. Exchange relations between the focal organization and members of its organization set in each of the four components of cooperative interaction were first measured separately and then combined to form composite measure (Riley, 1963). A brief discussion of each component score is presented below.

Component score 1: Information exchange The first component of the Cooperative Interaction Score between the focal organization and members of its organization set deals with a measure of information exchange. The respondents were given a list of organizations in the county including their own and asked:

Is...on your mailing list to receive your newsletters, annual reports and other information releases?

Is your organization on the mailing list of... to receive any of their newsletters, annual report and other information releases?

Responses to each items were simply yes or no. A yes was assigned a score of 1, and a no a score of 0. Affirmative responses to both items or to either one of them were given a score of 1. The information exchange score was obtained by adding all the scores between the focal organization and each set organization to form a subtotal of Cooperative Interaction Score.

Component score 2: Resource exchange The exchange of resources between the focal organization and members of its organization set considered here is concerned with the exchange of physical resources. The respondents were asked two questions regarding the exchange of resources with each other.

Has your organization shared, loaned or provided resources such as meeting rooms, personnel, equipment or funds to...at any time during the last two years?

Has...shared, loaned or provided resources such as meeting rooms, equipment or funds to your organization at any time during the last two years?

Responses to each item were simply yes or no. A yes was assigned a score of 1 and a no a score of 0. One point was scored to yes-responses to both items or to either one of them. The resource exchange score was obtained by summing up all the scores between the focal organization and each set organization to form a subtotal of Cooperative Interaction Score.

Component score 3: Overlapping boards or councils

Overlapping boards or councils is the exchange of members between the focal organization and members of its organization set serving on each other's board or council. It was empirically measured by asking the respondents two questions:

Does any one including staff, board members or members from your organization serve on boards, councils or committees of...?

Does any one from...serve on boards, councils or committees of your organization?

Response to these two questions were simply yes or no. Again, a yes was assigned a score of 1, and a no a score of 0. One point was scored to affirmative responses to both questions or to either one of them. The overlapping board or council scores between the focal organization and members of its organization set were summed up to form a

subtotal of Cooperative Interaction Score.

Component score 4: Joint efforts The last component of Cooperative Interaction Score is the joint efforts between the focal organization and members of its organization set. The empirical measure of joint efforts was based on one item where the respondents were asked:

Within the last five years has this unit of your organization worked jointly in planning and implementing any specific programs or activities with ...?

This question had two alternative responses of either yes or no. A yes was assigned a score of 1, and a no a score of 0. The joint effort score of the focal organization with members of its organization set was obtained by summing up all the scores that the focal organization had with each member of its organization set. The joint effort score forms a subtotal of Cooperative Interaction Score.

Finally, the Cooperative Interaction Score of the focal organization was obtained by summing up the four subtotal scores and dividing by the number of set organizations. The theoretical range was 0 to 4 with an actual range of 0 to 3.3 and a mean of 1.0. The actual distribution of Cooperative Interaction Scores is presented in Table 3.3.

The empirical and statistical hypotheses relating the Cooperative Interaction Score to the Goal Attainment Score are stated below.

Table 3.3. Distribution of Cooperative Interaction Scores^a

Score Range	Frequency	Percent	Cumulative Frequency
0 - .99	91	54.5	91
1.00-1.99	61	36.5	152
2.00-2.99	14	8.4	166
3.00-4.00	1	.6	167

^aDoes not include scores of the two organizations which are treated as missing cases.

E.H. 1: If the focal organization's Cooperative Interaction Score is high, then its Goal Attainment Score will be high.

S.H. 1: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

Intraorganizational commitment

It was hypothesized that: (1) if the focal organization's intraorganizational commitment is high, then its cooperative interaction will be high; and, (2) if the focal organization's intraorganizational commitment is high, then its goal attainment will be high.

This concept is defined as the extent to which the focal organization is, or is willing to become, committed to rural development by itself in isolation from other

organizations. It is operationalized as the level of commitment to which the focal organization has been or will become involved by itself in rural development programs and activities and has offered services to rural development efforts.

A composite measure (Riley, 1963) was used to measure the focal organization's intraorganizational commitment. It is called the Intraorganizational Commitment Score. Three questions (the first two had one item each, the third had eight items) consisting of 10 subitems were asked of each respondent to provide information about: (1) how his unit is involved in rural development, (2) how willing his unit is to become involved in development activities, and (3) whether his unit has provided different kinds of services relating to rural development. The three questions were:

1. Is your organization presently involved in any development activities in this county?
2. In terms of the goals and activities of this organization as it now exists do you believe your unit should, in any way either now or in the future, become involved in development activities in this county?
3. Here is a list of different kinds of services which your organization may offer. It might provide:
 - a. Financial assistance, i.e., direct financial payment to recipient, loans, grants,

- b. Referrals to private and public agencies,
- c. Formal educational services (e.g., formal classes),
- d. Mass media education services, including printed literature,
- e. Planning assistance,
- f. Technical assistance
- g. Assistance for attracting new industries,
- h. Other services.

The responses to each of these 10 subitems were simply yes or no. A yes was scored one point, and a no scored zero. A score of 1 was given to affirmative responses to both or to either one of the first two questions. One point was scored to an affirmative response for each service offered by an organization in question 3. Scored responses of these 10 subitems are then summed up to form the Intra-organizational Commitment Score. The theoretical range was 0 to 9, with an actual range of 0 to 9 and a mean of 4.9. The distribution of the actual Intraorganizational Commitment Score is presented in Table 3.4.

The next two empirical and statistical hypotheses may be stated as:

- E.H. 2: If the focal organization's Intraorganizational Commitment Score is high, then its Cooperative Interaction Score will be high.

Table 3.4. Distribution of Intraorganizational Commitment Scores^a

Score Range	Frequency	Percent	Cumulative Frequency
0 - 2.00	21	12.6	21
2.01- 4.00	44	26.3	65
4.01- 6.00	73	43.7	138
6.01- 8.00	28	16.8	166
8.01-10.00	1	.6	167

^aDoes not include scores of the two organizations which are treated as missing cases.

S.H. 2: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

E.H. 3: If the focal organization's Intraorganizational Commitment Score is high, then its Goal Attainment Score will be high.

S.H. 3: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

Interorganizational commitment

It was hypothesized that: (1) if the focal organization's interorganizational commitment is high, then, its cooperative interaction will be high; and, (2) if the focal organization's organizational commitment is high, then its goal attainment will be high.

This concept is defined as the degree to which the focal organization is or is willing to become committed to interagency rural development activities. It is operationally defined as the level of commitment to which the focal organization has been or will become involved in interagency development activities and has contributed resources to the interagency programs and services in rural development efforts.

Again, a composite measure was used to measure the focal organization's interorganizational commitment. It is called the Interorganizational Commitment Score. Three questions (the first two had one item each and the third had nine items) consisting of 11 subitems were asked each respondent to provide information about his unit: (1) involvement in interagency rural development programs, (2) willingness to become involved in interagency rural development programs, and (3) contribution of resources to interagency programs and activities relating to rural development. These questions were:

1. Has your unit of...been involved in any inter-agency program or project related to development in your county?
2. In the future, do you feel that your unit would in any way be willing to either participate in, or contribute resources to, an interagency development program?
3. Has your organization contributed any of the following resources to interagency programs in development?

- a. Funds,
- b. Professional time,
- c. Other staff time,
- d. Physical facilities,
- e. Materials (office supplies),
- f. Endorsement (public approval of),
- g. Members,
- h. Clients
- i. Others.

The responses to these 11 subitems were simply yes or no. One point was scored to affirmative responses to both question 1 and 2 or to either one of them. One point was scored to the yes-responses for each resource contributed to interagency programs in question 3. Scored responses of these 11 items were added up to form the total Interorganizational Commitment Score. The theoretical range was 0 to 10 with an actual range of 0 to 10 and a mean of 4.6. The actual distribution of the Interorganizational Commitment Score is presented in Table 3.5.

The empirical and statistical hypotheses are as follows:

E.H. 4: If the focal organization's Interorganizational Commitment Score is high, then its Cooperative Interaction Score will be high.

S.H. 4: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

Table 3.5. Distribution of Interorganizational Commitment Scores^a

Score Range	Frequency	Percent	Cumulative Frequency
0 - 2.00	48	28.7	48
2.01- 4.00	25	14.9	73
4.01- 6.00	49	29.3	122
6.01- 8.00	40	23.9	162
8.01-10.00	5	3.0	167

^aDoes not include scores of the two organizations which are treated as missing cases.

E.H. 5: If the focal organization's Interorganizational Commitment Score is high, then its Goal Attainment Score will be high.

S.H. 5: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

Domain consensus

It was hypothesized that: (1) if the focal organization's domain consensus is high, then its cooperative interaction will be high; and, (2) if the focal organization's domain consensus is high, then its goal attainment will be high.

Domain consensus is defined as the degree of agreement recognized by set organizations on the question of whether or not the focal organization should be involved in rural development. It is operationally defined as the level of acceptance by the administrators of the set organizations on the question of whether or not the focal organization should be involved in rural development.

One measure of domain consensus was used in this study. Each respondent was given a list of organizations and asked to evaluate which organizations, including his own, should be involved in rural development. The item used was:

Which of these organizations do you think should be involved in development?

This item had five response choices, namely, definitely should be involved, probably should be involved, not sure, probably should not be involved, and definitely should not be involved. The respective score assigned for the categories were 5, 4, 3, 2, 1. A Domain Consensus Score was obtained by adding all the evaluation scores given to a focal organization by its set organizations and dividing by the number of set organizations of that county. The theoretical range was 1 to 5, with an observed range of 2.5 to 4.9 and a mean of 4.2. The distribution of the observed Domain Consensus Score is presented in Table 3.6.

The next two empirical and statistical hypotheses can

Table 3.6. Distribution of Domain Consensus Scores^a

Score Range	Frequency	Percent	Cumulative Frequency
0 - .99	0	0	0
1.00-1.99	0	0	0
2.00-2.99	1	.6	1
3.00-3.99	45	26.9	46
4.00-5.00	121	72.5	167

^aDoes not include scores of the two organizations which are treated as missing cases.

be formulated as follows:

E.H. 6: If the focal organization's Domain Consensus Score is high, then its Cooperative Interaction Score will be high.

S.H. 6: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

E.H. 7: If the focal organization's Domain Consensus Score is high, then its Goal Attainment Score will be high.

S.H. 7: $H_0: \beta \leq 0$, $H_A: \beta > 0$.

Tests of Paths in the Path Model

The five variables in the path model found in Figure 2.2 have been operationalized and empirically measured in the previous section. Based on this path model, a set of recursive equations for the path model which represent cause and effect relationships among variables can be written as follows:

$$x_2 = b_{21}x_1 + e_2$$

$$x_3 = b_{31.2}x_1 + b_{32.1}x_2 + e_3$$

$$x_4 = b_{41.23}x_1 + b_{42.13}x_2 + b_{43.12}x_3 + e_4$$

$$x_5 = b_{51.234}x_1 + b_{52.134}x_2 + b_{53.124}x_3 + b_{54.123}x_4 + e_5$$

The above equations represent theoretical paths in the causal model. Each path coefficient represents the direct influence of a particular path in the model.

Methods of Analysis

Two major statistical techniques were used in the data analysis. First, regression analysis was employed to test the two variable hypotheses. The .05 level of probability was used as an acceptable indication of a statistical significant relationship. A one-tailed t. test was used because

the hypothesized relationships were directional. Second, to assess the causal model as a whole, a path analysis technique was employed to test the paths in the constructed model. Since this dissertation is an exploratory research analysis, the .10 level of significance with a one-tailed t test was used.

CHAPTER IV. FINDINGS

Introduction

In Chapter II general hypotheses were derived from theory and previous research and stated at the abstract level from the concepts delineated. These concepts were operationalized and measured in the empirical world of rural development in Chapter III. Empirical and statistical hypotheses were developed to represent the general hypotheses.

The findings of this dissertation will be presented in two main sections of this chapter. The first section deals with the statement and test of theoretical and empirical hypotheses. The procedure followed in this section will be to clearly state each general hypothesis, and its associated empirical and statistical hypotheses, and the result of the statistical test of significant evaluation. In the second section, the statistical testing of and the evaluation of each path in the causal model will be discussed.

Statement and Test of Theoretical and Empirical Hypotheses

Analysis of each two variable hypothesis in the first section employs regression analysis with a one-tailed t test because the hypothesized relationship is directional.

A hypothesis is accepted if the regression coefficient is significant in the hypothesized direction at the .05 level of probability or less.¹ The results of this regression analysis are summarized in Table 4.1.

Table 4.2 presents a matrix of correlations between the five variables studied. As can be seen, the magnitude of correlations between variables varied from .18 to .57. Each correlation between variables is statistically significant ($P < .01$) by one-tailed test. The mean and standard deviation of each variable are shown in Table 4.2.

Cooperative interaction and goal attainment

G.H. 1: If the focal organization's cooperative interaction is high, then its goal attainment will be high.

E.H. 1: If the focal organization's Cooperative Interaction Score is high, then its Goal Attainment Score will be high.

S.H. 1: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$

$b = .37$, $t = 6.08$, $p < .05$.

The hypothesized relationship between cooperative interaction and goal attainment is supported. The R^2 value was .18. This value means that cooperative interaction accounts for 18 percent of the variance in organizational goal attainment of development related organizations.

¹Tables in Walker and Lev (1969) are used for tests of significance.

Table 4.1. Summary of regression analysis for the two-variable hypotheses

Empirical Hypothesis (E.H.)	Hypothesized Relationship	Regression Coefficient	Standard Regression Coefficient	"T" Value	Result of Hypothesis Test
E.H. 1	Cooperative Interaction-Goal Attainment	.37	.43	6.08*	supported
E.H. 2	Intraorg. Commitment- Cooperative Interaction	.21	.57	9.03*	supported
E.H. 3	Intraorg. Commitment- Goal Attainment	.09	.28	3.73*	supported
E.H. 4	Interorg. Commitment- Cooperative Interaction	.12	.48	7.00*	supported
E.H. 5	Interorg. Commitment- Goal Attainment	.06	.26	3.49*	supported
E.H. 6	Domain Consensus- Cooperative Interaction	.37	.24	3.19*	supported
E.H. 7	Domain Consensus- Goal Attainment	.41	.31	4.11*	supported

* "T" values significant at .05 level or less by one-tailed test and the tabular $t_{(.05)} = 1.645$.

Table 4.2. Matrix of intercorrelations between the five variables in the model

Variable	X ₁	X ₂	X ₃	X ₄	X ₅	\bar{X}	S.D.
X ₁ -Domain Consensus	1.00					4.17	.43
X ₂ -Intraorg. Commit.	.19*	1.00				4.85	1.80
X ₃ -Interorg. Commit.	.18*	.42*	1.00			4.57	2.68
X ₄ -Cooperative Interaction	.24*	.57*	.48*	1.00		.98	.67
X ₅ -Goal Attainment	.31*	.28*	.26*	.43*	1.00	2.89	.58

* Indicates relationship significant at .01 level by one-tailed test.

Intraorganizational commitment and cooperative interaction

G.H. 2: If the focal organization's intraorganizational commitment is high, then its cooperative interaction will be high.

E.H. 2: If the focal organization's Intraorganizational Commitment Score is high, then its Cooperative Interaction Score will be high.

S.H. 2: a) H₀: $\beta \leq 0$, b) H_A: $\beta > 0$

b = .21, t = 9.03, p < .05.

The obtained regression coefficient significantly

confirms the hypothesized relationship between intraorganizational commitment and cooperative interaction. The R^2 value was .33. In other words, intraorganizational commitment explains 33 percent of the variance in cooperative interaction.

Intraorganizational commitment and goal attainment

G.H. 3: If the focal organization's intraorganizational commitment is high, then its goal attainment will be high.

E.H. 3: If the focal organization's Intraorganizational Commitment Score is high, then its Goal Attainment Score will be high.

S.H. 3: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$
 $b = .09$, $t = 3.73$, $p < .05$.

The relationship hypothesized between intraorganizational commitment and goal attainment is accepted. The R^2 value was .08. This value means that intraorganizational commitment accounts for 8 percent of the variance in organizational goal attainment.

Interorganizational commitment and cooperative interaction

G.H. 4: If the focal organization's interorganizational commitment is high, then its cooperative interaction will be high.

E.H. 4: If the focal organization's Interorganizational Commitment Score is high, then its Cooperative Interaction Score will be high.

S.H. 4: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$

$b = .12$, $t = 7.00$, $p < .05$.

The significant relationship ($b = .12$, $p < .05$) obtains between interorganizational commitment and cooperative interaction. The hypothesized relationship is supported by the data. The R^2 value was .23. In other words, interorganizational commitment accounts for 23 percent of the variance in cooperative interaction.

Interorganizational commitment and goal attainment

G.H. 5: If the focal organization's interorganizational commitment is high, then its goal attainment will be high.

E.H. 5: If the focal organization's Interorganizational Commitment Score is high, then its Goal Attainment Score will be high.

S.H. 5: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$

$b = .06$, $t = 3.49$, $p < .05$.

The data support the hypothesized relationship between interorganizational commitment and goal attainment. The R^2 value was .07. This value means that 7 percent of the variance of organizational goal attainment is explained by

the interorganizational commitment variable.

Domain consensus and cooperative interaction

G.H. 6: If the focal organization's domain consensus is high, then its cooperative interaction will be high.

E.H. 6: If the focal organization's Domain Consensus Score is high, then its Cooperative Interaction Score will be high.

S.H. 6: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$
 $b = .37$, $t = 3.19$, $p < .05$.

The hypothesized relationship between domain consensus and cooperative interaction is accepted. The R^2 value was .06. In other words 6 percent of the variance of cooperative interaction is explained by the domain consensus variable.

Domain consensus and goal attainment

G.H. 7: If the focal organization's domain consensus is high, then its goal attainment will be high.

E.H. 7: If the focal organization's Domain Consensus Score is high, then its Goal Attainment Score will be high.

S.H. 7: a) $H_0: \beta \leq 0$, b) $H_A: \beta > 0$
 $b = .41$, $t = 4.11$, $p < .05$.

The data reveal a significant relationship ($b = .41$, $p < .05$) between domain consensus and goal attainment and the hypothesized relationship is accepted. The R^2 value was .09. This value indicates that domain consensus accounts for 9 percent of the variance in organizational goal attainment.

Path Analysis and Evaluation of Paths in the Path Model

The conceptual causal model developed in Chapter II has been diagrammed in Figure 2.2. With the technique of path analysis (Wright, 1934; Duncan, 1966; Heise, 1969; Warren et al., 1968), the path diagram shows unidirectional arrows from each independent variable to all variables from which a causal relationship is hypothesized.

Path analysis in this chapter is based on the model illustrated in Figure 2.1 and 2.2 in Chapter II and represented by the recursive equations developed in Chapter III.

In this section, the computations of partial regression and standardized regression coefficients (path coefficients) for each path in the path model were based upon the study data. The t test of significance at .10 level is used to assess the computed t value for each partial regression coefficient. The purpose now becomes one of testing the path model for "goodness of fit" with the data

collected from development related organizations.

The findings of relationships between the independent and dependent variables in the path model are presented for all paths in Table 4.3 and paths for the path diagram in Figure 4.1. The percentage of variation in the dependent variable explained by the independent variables is shown by R^2 .

To evaluate whether or not the variables employed in the recursive equations should remain in the equation, a significance test is used. The null hypothesis for partial regression coefficient is zero ($\beta = 0$), is tested for each path coefficient. A one-tailed t test with .10 level of significance is used for each of the path coefficients.

Eight of the ten hypothesized causal relationships predicted in the model are statistically supported at .10 level by the one-tailed t test. The two paths not significantly supported at .10 level are the relationships between intraorganizational commitment and goal attainment and interorganizational commitment and goal attainment. Both intraorganizational commitment and interorganizational commitment variables were highly correlated with cooperative interaction ($r = .57$, $p < .001$; and $r = .48$, $p < .001$). Thus, intraorganizational commitment and interorganizational commitment have indirect effects through cooperative interaction on goal attainment. For that reason the causal

Table 4.3. T values, path coefficients and percent variance explained (R^2) in the path model of organizational goal attainment

Dependent and Independent Variables	Partial Regression Coefficient	"T" Value	Standardized Regression Coefficient (Path Coefficient)	R^2
X_2 -Intraorg. commitment				.04
X_1 -Domain consensus	.81	2.55*	.19	
X_3 -Interorg. commitment				.18
X_1 -Domain consensus	.62	1.40*	.10	
X_2 -Intraorg. commit.	.59	5.53*	.40	
X_4 -Cooperative interaction				.41
X_1 -Domain consensus	.16	1.72*	.11	
X_2 -Intraorg. commit.	.16	6.57*	.44	
X_3 -Interorg. commit.	.07	4.15*	.28	
X_5 -Goal attainment				.23
X_1 -Domain consensus	.28	2.93*	.21	
X_2 -Intraorg. commit.	.01	.24	.02	
X_3 -Interorg. commit.	.01	.67	.05	
X_4 -Cooperative interac.	.30	3.78*	.34	

* "T" values significant at .10 level by one-tailed test and the tabular $t_{(.10)} = 1.282$.

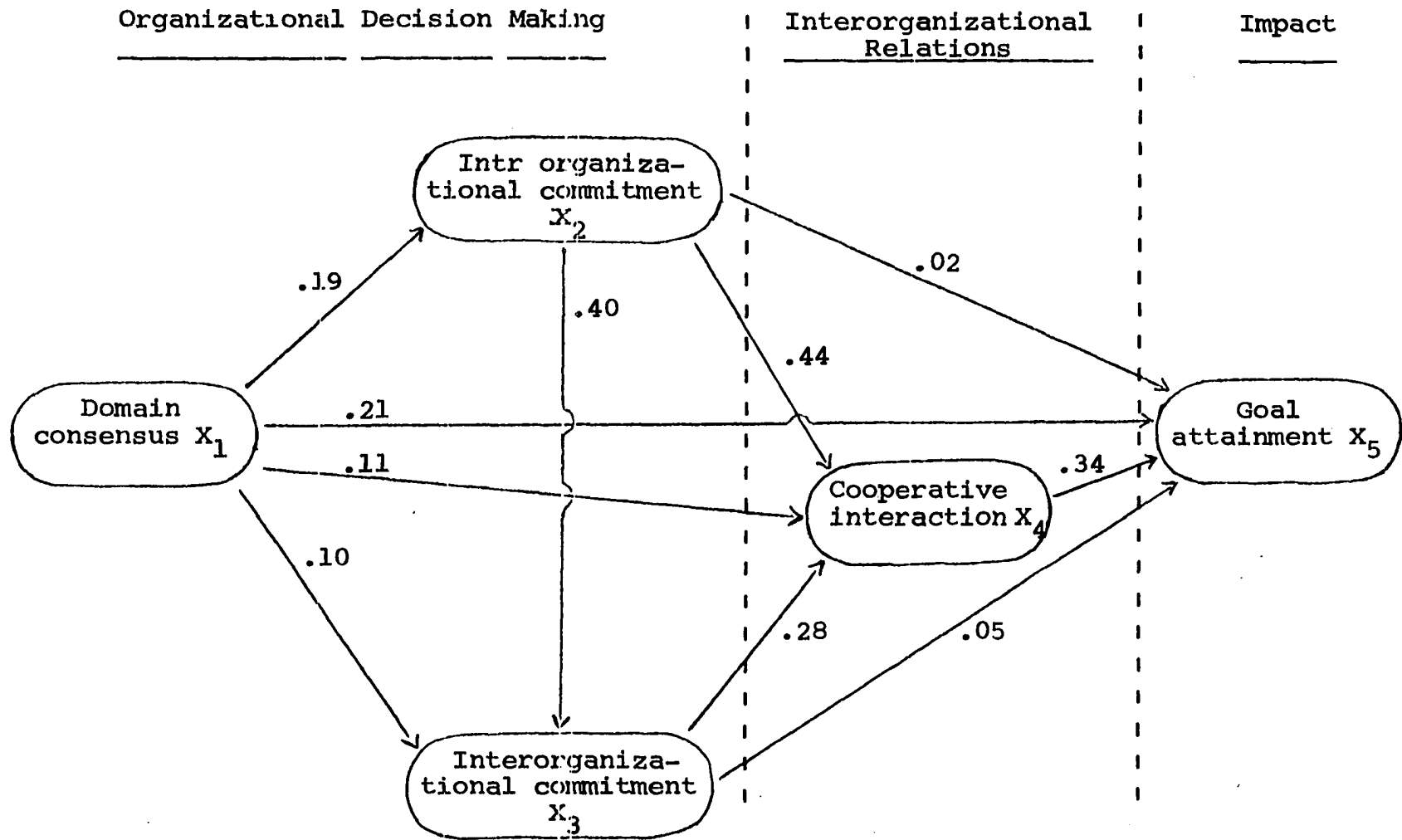


Figure 4.1. Path model of organizational goal attainment with all path coefficients presented

arrows between these variables, whose path coefficients are not statistically significant, are deleted from the model as suggested by Duncan (1966):

Had some of the b's turned out both nonsignificant and negligible in magnitude, one could have erased the corresponding paths from the diagram and run the regression over, retaining only those independent variables found to be statistically and substantively significant (1966:7).

This procedure results in a modification of the path model. The recursive equations representing the modified path model are:

$$X_2 = b_{21}x_1 + e_2$$

$$X_3 = b_{31.2}x_1 + b_{32.1}x_2 + e_3$$

$$X_4 = b_{41.23}x_1 + b_{42.13}x_2 + b_{43.12}x_3 + e_4$$

$$X_5 = b_{51.4}x_1 + b_{54.1}x_4 + e_5$$

Again, partial regression and standardized regression coefficients (path coefficients) in the modified model were computed. The findings of the relationships between the independent and dependent variables are presented in Table 4.4 and significant paths for the path diagram in Figure 4.2. It should be pointed out that the deletion of the two nonsignificant paths increases the magnitude of the path coefficient between cooperative interaction and goal attainment from .34 to .38. The multiple R^2 remains roughly

Table 4.4. T values, path coefficients and percent variance explained (R^2) in the modified path model of organizational goal attainment

Dependent and Independent Variables	Partial Regression Coefficient	"T" Value	Standardized Regression Coefficient (Path Coefficient)	R^2
X_2 -Intraorg. commitment				.04
X_1 -Domain consensus	.81	2.55 *	.19	
X_3 -Interorg. commitment				.18
X_1 -Domain consensus	.62	1.40 *	.10	
X_2 -Intraorg. commit.	.59	5.53 *	.40	
X_4 -Cooperative interaction				.41
X_1 -Domain consensus	.16	1.72 *	.11	
X_2 -Intraorg. commit.	.16	6.57 *	.44	
X_3 -Interorg. commit.	.07	4.15 *	.26	
X_5 -Goal attainment				.23
X_1 -Domain consensus	.29	3.03 *	.21	
X_4 -Cooperative interac.	.33	5.31 *	.38	

* "T" values significant at .10 level by one-tailed test and the tabular $t_{(.10)} = 1.282$.

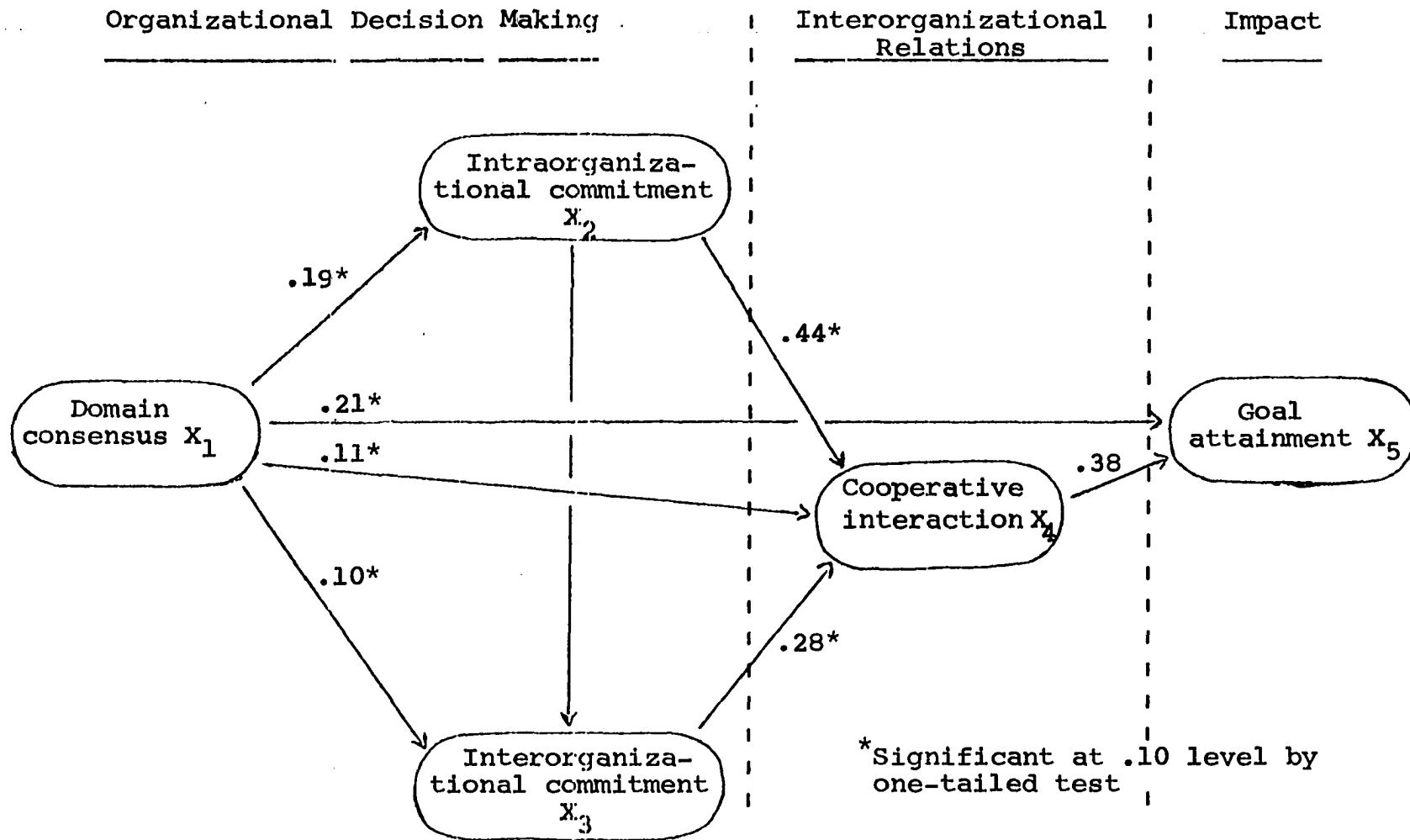


Figure 4.2. Modified path model of organizational goal attainment with all significant paths presented

the same (.23) in the modified model after dropping intra-organizational commitment and interorganizational commitment. A brief discussion of the findings based on the path analysis of the modified model is presented below.

First, domain consensus and cooperative interaction variables have direct relationships with organizational goal attainment. Their relative effects can be evaluated by comparing their respective path coefficients presented in Table 4.4, and values placed on the arrows in the path diagram found in Figure 4.2.

Cooperative interaction has greater relative effect than domain consensus on organizational goal attainment. The two variables have combined effects in the prediction of organizational goal attainment. The multiple partial R^2 value was .23. This value means that these two variables explain 23 percent of the variance in goal attainment. Domain consensus and cooperative interaction thus contribute significantly to the explanation of organizational goal attainment of development related organizations.

Second, the modified path model suggests that intra-organizational commitment, interorganizational commitment and domain consensus have direct effects on cooperative interaction. Their relative importance is evaluated through direct comparison of their respective path coefficients shown in Table 4.4 and values placed on the path

diagram in Figure 4.2.

Intraorganizational commitment indicates a greater effect than either interorganizational commitment or domain consensus on cooperative interaction. The network represented by these four variables has a combined effect on the prediction of cooperative interaction. The multiple R^2 value was .41. They contribute significantly to the explanation of the occurrence of cooperative interaction of development related organizations.

Third, the modified path model indicates that domain consensus has a direct relationship with intraorganizational commitment. The R^2 value was .04. In other words, domain consensus accounts for only four percent of the variance in intraorganizational commitment. This variable appears to have only a little significant direct effect on intraorganizational commitment of development related organizations.

Fourth, domain consensus and intraorganizational commitment have direct effects on interorganizational commitment. The path coefficients found in Table 4.4 and in Figure 4.2 can be compared directly for their relative importance. The multiple R^2 was .18, meaning that 18 percent of the variance of interorganizational commitment is explained by the two variables. Even though R^2 is not quite large, the two variables appear to affect the level

of interorganizational commitment of development related organizations.

In summary, this chapter has presented the study findings. The two variable hypotheses have been tested and all have been accepted. The tests and evaluations of the significant paths in the original causal model and a modified path model were also presented.

CHAPTER V. IMPLICATIONS

Introduction

The purpose of this chapter is to indicate implications of the study findings for the following areas: (1) theory, (2) research methods, (3) future research, and (4) practical realms regarding rural development. Some of the discussions presented in these four sections are interrelated. For example, suggestions made with respect to theory and methodology may have implications for future research.

Implications for Theory

The present study attempts to investigate sociological problems of rural development. Specifically, it has been concerned with research problems of explaining cooperative interaction and organizational goal attainment of development related organizations.

The introduction of organizational goal attainment of development related organizations as input into interorganizational analysis is useful. Organizational goal attainment is conceptualized to serve as an output to the operating organizational system. The cooperative interaction variable has been conceptualized in this study as an intervening variable which serves as an input as well as an output to the rural development related organizations. It is

viewed that the level of the focal organization's goal attainment is produced or caused by two major factors, namely, organizational decision making and interorganizational relations factors. It is also postulated in this study that the three organizational decision making variables are causally related to the cooperative interaction variable.

The results of the study analysis contribute to the development of theory to explain and/or predict this kind of sociological phenomena. Six implications for theory are discussed below.

1. The theoretical framework based on exchange, open systems and system approaches, when organizations are considered as units of analysis, are useful devices to explain and/or predict organizational behavior. That is, the theoretical framework seems to provide adequate explanation and understanding to cooperative interaction and organizational goal attainment. Only two of the 10 hypothesized paths of the theoretical causal model were not supported in the empirical investigation.

2. One of the assumptions made for the purpose of this study was that an increase in cooperation between organizations will lead to an increase in organizational goal attainment. Another assumption made was that understanding complex organizations and their interorganizational relationships is one component of understanding rural development.

These assumptions appear to be supported from the data, that is, cooperative interaction was causally related to organizational goal attainment. Cooperative interaction was also found to be a significant intervening variable between organizational decision making and organizational goal attainment variables.

3. The technique of path analysis does provide valuable information about the causal relationships among the set of variables studied. This technique also provides relative path magnitudes (coefficients) so that comparisons of their direct effects can be made. The specification and causal orderings of variables in the model appear to conform with the existing body of IOR knowledge.

The implication of the modified path model is that it represents a better fit between the theory and empirical data than the original posited theoretical causal model.

4. Even though theoretical perspectives discussed in Chapter II are useful guidelines in dealing with certain problems or situations, there is a need for more general theoretical inputs in terms of development of concepts, models and theory in this area. For example, there is a need to develop models to explain more of the variance of interorganizational relations and its consequences.

5. Since rural development represents only one type of interorganizational phenomena, it would appear fruitful

to use the concepts, hypotheses, and models included in this study to analyze other empirical interorganizational situations. It should be noted that one of the major attempts of this research is to investigate the question that seems to be empirically unexplored in the study of interorganizational analysis. That is, the investigation of the outcome of interorganizational relations on organizational goal attainment. However, other aspects of the impact of IOR, i.e., on clients, interorganizational relations themselves, and community characteristics, should be investigated so advances in theory building can be made.

6. A major limitation of the theory used in this study concerns the independent variables that might have been predictive of the dependent variables of organizational goal attainment and cooperative interaction but were not used. In particular, variables of organizational characteristics (i.e., structural variables), psychological factors (i.e., attitudes) and other external variables outside the organization set (i.e., directives from higher administrative levels) have been excluded from the study. The reason for not including those variables was not because they were unimportant, but because the author thought it would be more efficient to analyze a few key variables than to choose many variables that might have had an effect on the dependent variables.

In summary, it is believed that the empirical findings of this study contribute to the advancement of sociological theory.

Implications for Research Methods

An interorganizational network in rural development is a complex social system having many organizations, elements and dynamic processes in which these organizations interact and interrelate. In this organizational network or set, there are many kinds of organizations that are different in organizational structures, social conditions, goals, and organizational environment. The simple two variable approach seems to be less effective to handle the analysis of the complex situations and variety of organizations in the network. It appears that a combination of both regression and path analysis employed in this study provides a more comprehensive approach to dealing with interorganizational behavior of the rural development situation.

The technique of path analysis employed in this research has several advantages. It can provide pertinent information and knowledge about the direct and indirect causal relationships among the five variables studied. This technique provides information regarding the relative importance of path coefficients making comparisons among these effects possible.

Survey research techniques used in this study have much to offer to obtain data in rural development research than secondary sources, personal observation or records. Much can be gained from the techniques such as measurement, research design, and sampling used in this study. The advantages offered by survey research techniques should be considered for future rural development research to gain advantages they provide.

The research techniques employed in this study emphasized quantitative data which were obtained from structured interviews of 167 top administrators of development related organizations in 16 counties in Iowa. This represents a rather large representative sample. However, attention should be given to larger numbers of interorganizational relations for model building, theory testing and generalization from samples to the population.

Future methodological efforts should also replicate the techniques used in the present study in other studies. Through repeated applications of the measures, some standard methodological tools can be developed and advanced in the discipline.

This research design has some weak points which are mainly measurement problems. Since this dissertation was developed after the data were initially collected, the way data were collected imposed certain limitations on empirical

analysis. More general indices along with cross-validation of measures are suggested, i.e., develop and use several items to measure a concept.

Measures of domain consensus and goal attainment were based mainly on one item. A more comprehensive measure is needed to increase the reliability and validity of measurement which will further result in increased stability and prediction with the constructed model.

Another weak point is the measure of cooperative interaction. This variable measured only the exchange linkages between organizations but did not include the units being exchanged between them. Future efforts to measure cooperative interaction should consider the inclusion of units being exchanged.

It is suggested that an accurate definition of theoretical concepts and models is needed such that operational definition and measurement of concepts can be made more accurately.

Implications for Future Research

With regard to the implications for future research, the following is a list of considerations for interorganizational analysis.

1. Most of the IOR analysis in the past has been based on data collected from an agency and its relevant

field which focused on a narrow problem. The approach taken in this study enables a researcher to examine each specific organization in a network of relations at a local level. For example, researchers may use this approach to examine how an organization relates horizontally to others in the network in a community and to what extent this affects its goals. Replication of this model in other rural development settings would further validate the model.

2. Future research goals should involve the use of the models developed in this study to investigate and test organizational goal attainment as the result of interorganizational relations in different empirical situations, i.e., using other organizations in addition to replicating with development related organizations. This goal is necessary to determine if the model is generally applicable to other fields.

3. Future research should apply the constructed model to focus on other aspects of consequences of interorganizational relations in rural development, i.e., individual, interorganizational relations, and community characteristics. It is also suggested that comparisons among various types of IOR impacts should be made. This will provide useful information and insights into the consequences of interorganizational relations. There seems to be several possibilities for future research where the techniques suggested here

could be employed.

Implications for Practical Realms

The results obtained from this study have implications for those who seek to secure greater cooperation between organizations and organizational performances in rural development. The findings from this study suggest that organizations which possess more organizational decision making and interorganizational characteristics tend to come nearer achieving their goals.

On the basis of these findings, three following suggestions for practical use are suggested.

1. The primary implication to those administrators holding positions on development related organizations is that: (a) one of the most effective ways to improve their organizational goals is to be aware of and to promote more organizational decision making characteristics, namely, domain consensus, intraorganizational commitment and inter-organizational commitment; and, (b) in doing so, they will increase chances for more cooperative interaction which in turn will effect their goal attainment. One could combine and make use of the information in this study in establishing relationships or selecting certain organizations as potential partners, improving future administrative policies, policy formation and execution.

2. Information gained from this study may be important to those policy-makers, social practitioners and the like involved in the general process of rural development. It is suggested that they should become aware of and try to create or establish appropriate organizational decision making and interorganizational relations conditions in their organizations so that cooperation and organizational goals can successfully be achieved.

3. Information obtained from this study may assist county rural development committees in planning and executing policies as well as implementing rural development efforts in their counties. Available information from this study could provide knowledge to county rural development committees about the potential roles of organizational decision making and interorganizational relations factors in organizational goal attainment. Likewise, these committees might encourage development related organizations in their counties to cooperate more in rural development programs and activities which would be beneficial to them. Besides, cooperation between organizations may reduce competition and conflict. Organizations possessing less organizational decision making characteristics may be appropriately encouraged by these committees to increase the chances for more cooperative interaction and organizational goal attainment.

CHAPTER VI. SUMMARY

The procedure in this chapter is to review and assess research findings on each of the objectives of the study.

This dissertation is an attempt to examine organizational goal attainment of development related organizations in the rural development field. As stated at the outset, the three objectives of this study were: (1) identification and delineation of the concept of interorganizational relations and its relationship to organizational goal attainment, (2) identification and delineation of selected concepts related to interorganizational relations and organizational goal attainment, (3) development of a causal model of interorganizational relations by which to explain and understand organizational goal attainment and application of path analysis to evaluate the causal model constructed.

In Chapter II, the conceptual causal model of interorganizational relations in explaining organizational goal attainment was presented. Two major perspectives related to the analysis of organizational goal attainment were reviewed. The system and open systems approaches appear to have proved fruitful in studying organizational goal attainment or productivity. Based on these perspectives, a theoretical framework was formulated for the analysis of organizational goal attainment of rural development related

organizations at the county level. Each development related organization was treated as a focal organization. The organizations to which the focal organization interacts or relates to in a county are considered to be members of its organization set or its set organizations. Development related organizations treated as units of analysis were conceived as open systems in that they engage in the exchanges with organizations in their environments for the purpose of attaining their goals. Goal attainment was defined as the degree of effectiveness of the focal organization in achieving its goals evaluated by the organization set.

Another major focal concern in the theoretical chapter is the theoretical formation of the cooperative interaction concept. Cooperative interaction is conceptualized as a form of interorganizational relations. Theoretical perspectives, namely, open systems and exchange approaches, relating to interorganizational relations were reviewed and discussed. Based on these theoretical perspectives, a theoretical framework was formulated for the analysis of cooperative interaction between the focal organization and members of its organization set.

The implication of the exchange perspective to development related organizations is that cooperative interaction between the focal organization and members of its organization

set was viewed as exchanges.

The open systems approach was also incorporated into the development of cooperative interaction concept. An organization and its relationship to the elements in its environment are conceptualized as interdependent and the organization must acquire necessary resources for the attainment of its goals. An organization cooperating in exchanges must rely principally on an input-output process for realization of goal attainment. Cooperative interaction was defined as exchange, both unilateral and bilateral, between organizations and assumed to have beneficial effects on goal attainment. The indicators of cooperatives interaction were based on the exchange of information, resources, members of overlapping boards or councils, and joint efforts between organizations.

Five general concepts were delineated by integrating theoretical points of view from the existing body of IOR knowledge. The five concepts were: (1) organizational goal attainment, (2) cooperative interaction, (3) intra-organizational commitment, (4) interorganizational commitment and (5) domain consensus.

From a review of the literature, variables conceived to be related to organizational goal attainment and cooperative interaction were formulated. Four general hypotheses relating to organizational goal attainment and

three relating to cooperative interaction were theoretically formulated and stated in seven general hypotheses. These hypotheses are listed below.

- G.H. 1: If the focal organization's cooperative interaction is high, then its goal attainment will be high.
- G.H. 2: If the focal organization's intraorganizational commitment is high, then its cooperative interaction will be high.
- G.H. 3: If the focal organization's intraorganizational commitment is high, then its goal attainment will be high.
- G.H. 4: If the focal organization's interorganizational commitment is high, then its cooperative interaction will be high.
- G.H. 5: If the focal organization's interorganizational commitment is high, then its goal attainment will be high.
- G.H. 6: If the focal organization's domain consensus is high, then its cooperative interaction will be high.
- G.H. 7: If the focal organization's domain consensus is high, then its goal attainment will be high.

Following the two variables hypotheses, the path model of organizational goal attainment was developed. The same

five concepts used in the two variables analysis were articulated in the path model found in Figure 2.2.

In the chapter on methodology, the population and sample of counties and organizations were discussed. A sample of 169 development related organizations from 16 counties in Iowa provided the data for the evaluation of the hypotheses and the conceptual causal model. The data were collected by means of mailed questionnaire and structured interview obtained during August and September, 1971.

Each of the five concepts delineated in the theoretical discussion was operationalized and empirically measured. For each of the seven two variable hypotheses, an empirical hypothesis was generated. The statistical technique used to test the bivariate relationships of the empirical hypotheses was regression analysis. A .05 level of probability was used to assess a statistical significant relationship.

For the path model, the same five concepts previously delineated were causally linked in a one-way causation framework, with organizational goal attainment the final concept in the model. The statistical technique used to evaluate paths in the model was partial regression analysis. Since it was of an explanatory nature, a .10 level of probability was used.

In Chapter IV, the results of the findings of the two

variable hypotheses and the path analysis were presented. With regard to the two variable hypotheses, all of the seven empirical hypotheses were significantly supported when using the Organizational Goal Attainment and Cooperative Interaction Scores as the dependent variables. A brief summary of each of the independent and dependent variable relationships is as follows:

1. There is significant support for the hypothesis that there is a causal relation between cooperative interaction and organizational goal attainment.

2. The hypothesized relationship between intra-organizational commitment and cooperative interaction is significantly supported.

3. The hypothesized relationship between intra-organizational commitment and goal attainment is sufficiently supported.

4. There is a significant causal relationship existing between interorganizational commitment and cooperative interaction.

5. It is concluded that interorganizational commitment is causally related to organizational goal attainment.

6. It is concluded that the hypothesized relationship between domain consensus and cooperative interaction is causally related.

7. Finally, the relationship between domain consensus and organizational goal attainment is significantly supported.

For the tests of significance for path coefficients, the *t* values and path coefficients for those hypothesized paths in the path model were computed and presented in Figure 4.1 and Table 4.3. Eight of the ten hypothesized paths were found significant at ten percent level of probability. The two nonsignificant paths were from intra-organizational and interorganizational commitments to goal attainment. It was interpreted that the cause of these nonsignificant paths was due to their high correlations with cooperative interaction. Consequently both variables have indirect effects through cooperative interaction on goal attainment.

The two nonsignificant paths were then dropped out of the causal model to explain organizational goal attainment. The remaining paths were recomputed which resulted in a modified path model. These findings are presented in Table 4.4 and the path diagram is shown in Figure 4.2. A brief summary of the findings of the eight significant paths is listed below:

1. Both domain consensus and cooperative interaction contribute significantly to the prediction of organizational goal attainment. Each has a significantly direct effect on

organizational goal attainment.

2. Intraorganizational commitment, interorganizational commitment and domain consensus have direct effects on cooperative interaction. These three variables appear to contribute significantly to the explanation of cooperative interaction.

3. The path between domain consensus and intraorganizational commitment is significant but it appears that domain consensus contributes little in the prediction of intraorganizational commitment.

4. Both paths from domain consensus and intraorganizational commitment to interorganizational commitment are significant. These two variables account for 18 percent of the variance in interorganizational commitment.

In Chapter V, the implications of the research for theory, for research method, for future research and for practical use was discussed.

In terms of the implications for theory, it was suggested that when organizations are treated as units of analysis, the theoretical framework based on exchange, open systems, and system approaches appear to be useful in the explanation and prediction of organizational goal attainment and cooperative interaction. It was also suggested that path analysis may be useful in the construction of model building, and the classification and causal

ordering patterns of variables in the model are appropriate for consideration in IOR. A suggestion was made that more attention should be focused on the development of concepts, models and theory in interorganizational relations and its consequences on organizational goal attainment. It was pointed out that all the independent variables that might have been predictive of the dependent variables were not included in the model.

In terms of the implications for research methods, it was suggested that several advantages can be gained from the techniques used in this dissertation. It was suggested that future methodological efforts should strive for more improvement of measures as indicators of concepts, i.e., development of general indices for more precision in measurement of variables; better research designs; and adequate sampling. Further methodological efforts should replicate the techniques used in this study in future studies so that methodological tools can be constructed and advanced in the discipline. Attention for more accurate definition of theoretical concepts and models was suggested. It was suggested that model building using the path analysis technique be encouraged for use by sociologists.

A list of suggestions concerning implications for future research was presented. First, future research efforts should test the model constructed in this study in

other rural development settings to determine its generalizability to rural development. Second, future research should use the model developed in this study to examine the impact of IOR in other empirical situations in addition to the rural development arena. Third, other areas of the impact of interorganizational relations should be examined in future research so that information and knowledge about the consequences of IOR can be further understood.

Finally, implications for practical realms were suggested. One was that relevant information obtained from this study would be valuable to those who seek to secure greater cooperation between organizations and organizational performances in rural development. It was suggested to those administrators of development related organizations that they could combine and make use of the information gathered in this study in establishing relationships or selecting other organizations as potential partners, improving future administrative practices, policy formation as well as execution. It was suggested to county rural development committees that information gained from this study can assist them in planning and executing policies as well as implementing rural development efforts in their counties. It was also suggested, in general, that those who are involved in the general rural development process should not only be aware of factors or conditions relating

to cooperation between organizations and goal attainment but must create or encourage these conditions in development related organizations so general rural development goals can be achieved.

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